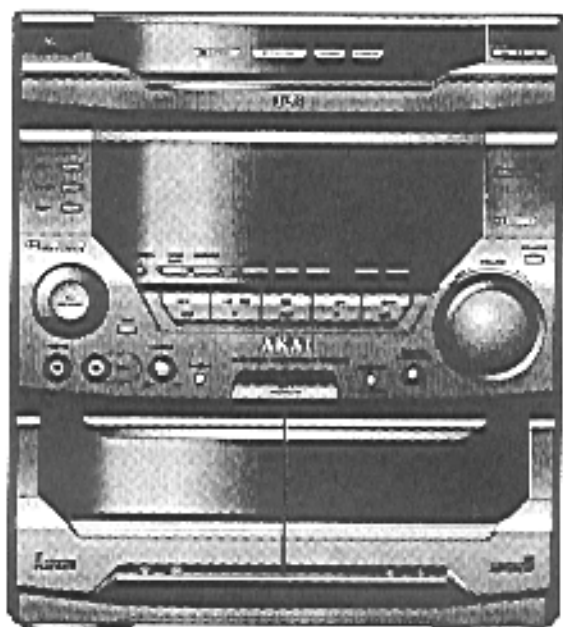


# AKAI SERVICE MANUAL



- The above illustration shows the AC-620 model.

COMPACT  
**disc**  
DIGITAL AUDIO

 DOLBY B NR

 DOLBY SURROUND  
PRO • LOGIC

MINI STEREO COMPONENT SYSTEM

MODEL **AC-420/423R/425K**

MODEL **AC-620/623R/625K**

MODEL **SR-425**

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## SAFETY INSTRUCTIONS

### PRECAUTIONS DURING SERVICING

1. Parts identified by the  (\*) symbol parts are critical for safety. Replace them only with parts whose numbers are 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 selection 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) Insulating Tape
  - 2) PVC tubing
  - 3) Spacers (insulating barriers)
  - 4) Insulating sheets for transistors
  - 5) Plastic screws for fixing micro switches
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitor, etc.), wrap ends of wires securely about the terminals before soldering.



6. Make sure that wires do not contact heat generating parts (heat sinks, oxide metal film resistors, fusible resistors, etc.)
7. Check if replaced wires do not contact sharply edged or pointed parts.
8. Also check areas surrounding repaired parts.
9. Make sure that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

### MAKE YOUR CONTRIBUTION TO PROTECT THE ENVIRONMENT

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



Please leave them at an appropriate depot.

### SAFETY CHECK AFTER SERVICING

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

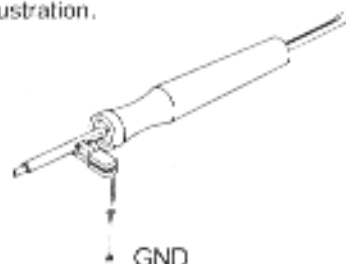
The leakage-current measurement should be done between accessible metal parts, (such as chassis, ground terminal, microphone jacks, signal input/output connectors, etc.) and the earth ground through a resistor of 1500 ohm paralleled with a 0.15  $\mu$ F capacitor, under the unit's normal working condition.

The leakage-current should be less the 0.5mA rms AC. The resistance measurement should be done between accessible exposed metal parts and power cord plug prongs with the power switch "ON" (if included). The resistance should be more than 2.2Mohms.

### PRECAUTIONS IN REPAIRING

When repairing or adjusting the unit, please note the following points

1. Do not put excessive pressure on the mechanical part (operation part), including the pick-up block, as extremely high mechanical precision is required in these parts.
2. When the base is removed for repair or adjustment. Make sure that there are no metal objects between the P.C board or the mecha parts and the base.
3. The Micro-Computer and the CD signal processing ICs may be damaged by static electricity or leakage from a soldering iron during repairing. While soldering, please take the precautions against leakage as in the illustration.



4. Do not loosen any screws in the pick-up block. Please refer to NOTE when replacing the pick up block.
5. To avoid hazardous invisible Laser Radiation, do not look at the Laser Beam (Objective lens) directly.
6. On model for some countries, laser warning labels are affixed on and inside of the unit as shown below. For your safety, read these labels carefully before repairing or adjusting the unit.

### CAUTION

The use of controls or adjustments or the performance of procedures other than those specified herein may result in hazardous radiation.

[ EUROPE, SCANDINAVIA, UK and AUSTRALIA ]

CLASS 1 LASER PRODUCT  
KLASSE 1 LASER PRODUKT  
LUCKAN 1 LASER LÄMPE  
KLASSE 1 LASER APPARAT

Label affixed on the rear panel of the unit.

CAUTION: INVISIBLE LASER RADIATION WHEN OPEN.  
ME INTERLOCK. REPEATED AVOID EXPOSURE TO BEAM.  
ADVÄRSEL: USYNLIG LASERSTRÅLNING VED ÖPP-  
NING. SÄKERHEDSÅFBRYDARE ER LÖSE ÅPPNINGEN  
UNDGÅD OBTÄLLSE FÖR STRÅLNING.  
VARO: AVATTAESSA JA SUOJALUKITUS OHITET,  
TÄESSÄ OLEVA ALTITINA NÄKYVÄTÖNÄLLÄ LASERISÄTE-  
LÄ.  
ÄLÄ KÄYTTÖSÄTEESSEEN.  
VARNING: ÖPPNING LASERSTRÅLNING NÄR DENNA  
DEL ÄR ÖPPNAD OCH SPÄRREN ÄR LÖSNOPPLAD.  
BETRÄKTA EJ STRÅLEN!

Label affixed on the CD MECHA BLOCK

## INFORMATION

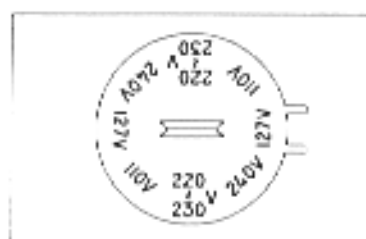
### SYMBOLS FOR PRIMARY DESTINATION

Alphabet indicates the destination of the units as listed below.

| Symbol | Principal Destination |
|--------|-----------------------|
| [A]    | USA                   |
| [B]    | UK                    |
| [E]    | Europe (except, UK)   |
| [S]    | Australia             |
| [Y]    | Germany               |
| [U]    | Universal             |
| [Y*]   | Custom version        |

### VOLTAGE CONVERSION( [U] [Y] Model only)

Before connecting the power cord, set the VOLTAGE SELECTOR located on the rear panel of the AC-425K/625K so that the correct voltage for your area is indicated.



[U5, U8, Y6, Y7]

### TEST MODE

Various kind of test modes are installed in this unit's microcomputer in order to test them on the production line. Following test modes among the various test modes can be used for adjustment, operation check or maintenance. To terminate the test mode, simply press the "POWER ON/STANDBY" button or disconnect the AC power cord from the AC outlet.

#### 1. DECK TEST MODE

This test mode can be used for tape speed adjustment as well as bias oscillator frequency adjustment in TAPE DECK section.

While pressing and holding the "TAPE II" and "▶" (F) buttons, connect the AC power cord to AC outlet. The function turns to "TAPE I" and "DUBX1" as well as "T P I 0 0 0" indicators on the FLD light when this mode is engaged.

#### 2. DECK CLEANING MODE

This test mode can be used for cleaning of the TAPE DECK mechanism.

Because, this mode enables engaging of the playback, fast forward (FF), and rewind (RWD) modes without a cassette tape, it makes the cleaning (such as the capstan shaft, magnetic head, pinch roller etc.) easier. While pressing and holding the "TAPE I" and "◀ II" (F) button, connect the AC power cord to the AC outlet. The tape run indicator light without the cassette tape when this mode is engaged.

## SPECIFICATIONS

### [Tuner Section]

Frequency range

|    |                                          |
|----|------------------------------------------|
| FM | 87.5-108MHz(50KHz step)                  |
| MW | 530-1710KHz(U8)                          |
|    | 531-1602KHz (except U8)                  |
| LW | 144-288KHz(1KHz step) (E1/E2/E3/B1 only) |
| SW | 3.8-12.5MHz(5KHz step) (Y7 only)         |

### USABLE SENSITIVITY

|    |                                        |
|----|----------------------------------------|
| FM | 16.2dBf IHF,3%THD (except E1/E2/E3/B1) |
|    | 20.2dBf IHF,3%THD (E1/E2/E3/B1)        |
| MW | 500uV/m                                |
| LW | 800uV/m                                |
| SW | 800uV/m                                |

### S/N Ratio(IHF)

|                   |                        |
|-------------------|------------------------|
| FM                | MONO 75dB, STEREO 65dB |
| MW                | 40dB                   |
| LW                | 30dB                   |
| SW                | 30dB                   |
| Stereo separation | 40dB(at 1KHz)          |

### [AMPLIFIER Section]

|                            |                                                 |
|----------------------------|-------------------------------------------------|
| Power output               | (AC-420/423R/425K) 50W+50W(6ohms, 10%THD, EIAJ) |
|                            | 40W+40W (6ohms, 1%THD, DIN)                     |
|                            | (AC-620/623R/625K) 30W+30W(6ohms, 10%THD, EIAJ) |
|                            | 25W+25W (6ohms, 1%THD, DIN)                     |
| Input sensitivity (AUX IN) | 310mV/47K $\Omega$                              |
| channel separation         | 70dB                                            |
| Frequency response         | 10Hz-100KHz(-3dB)                               |

### [DECK SECTION]

|                           |                                      |
|---------------------------|--------------------------------------|
| Track system              | 4track, 2channel system              |
| Frequency response        | 40Hz-15KHz (Normal tape, $\pm 3$ dB) |
|                           | 40Hz-16KHz(Cro2 tape, $\pm 3$ dB)    |
| Wow & Flutter             | 0.09% (WRMS), 0.15%(DIN)             |
| S/N ratio                 | Dolby B 63dB (5KHz)                  |
|                           | Dolby off 53dB (Cro2 tape)           |
| Total harmonic distortion | less than 0.5%(normal tape at 315Hz) |
| Channel separation        | 43dB                                 |

**[CD SECTION]**

|                                 |                               |
|---------------------------------|-------------------------------|
| Pick up system .....            | 3Beam Laser                   |
| Sampling frequency .....        | 44.1KHz                       |
| Error correction system .....   | Cross interleave read solomon |
| Number of channels .....        | 2Channel                      |
| Frequency response .....        | 20Hz-20KHz                    |
| Wow & Flutter .....             | Below measurable limits       |
| S/N ratio .....                 | 83dB                          |
| Total harmonic distortion ..... | 0.035% (at 1KHz)              |
| Channel separation .....        | 73dB(at 1KHz)                 |
| Dynamic range .....             | 82dB (at 1KHz)                |

**[GENERAL]**

|                         |                                                |
|-------------------------|------------------------------------------------|
| Power requirement       |                                                |
| E1/E2/E3/B1/S1 .....    | AC 220-230V/50Hz                               |
| U5/U8/Y6/Y7 .....       | AC110/127/220-230/240V, 50/60Hz                |
| Power consumption ..... | 110W/AC-420/423R/425K, 130W/AC-620/623R/625K   |
| Weight .....            | 8.2Kg/AC-420/423R/425K, 8.2Kg/AC-620/623R/625K |

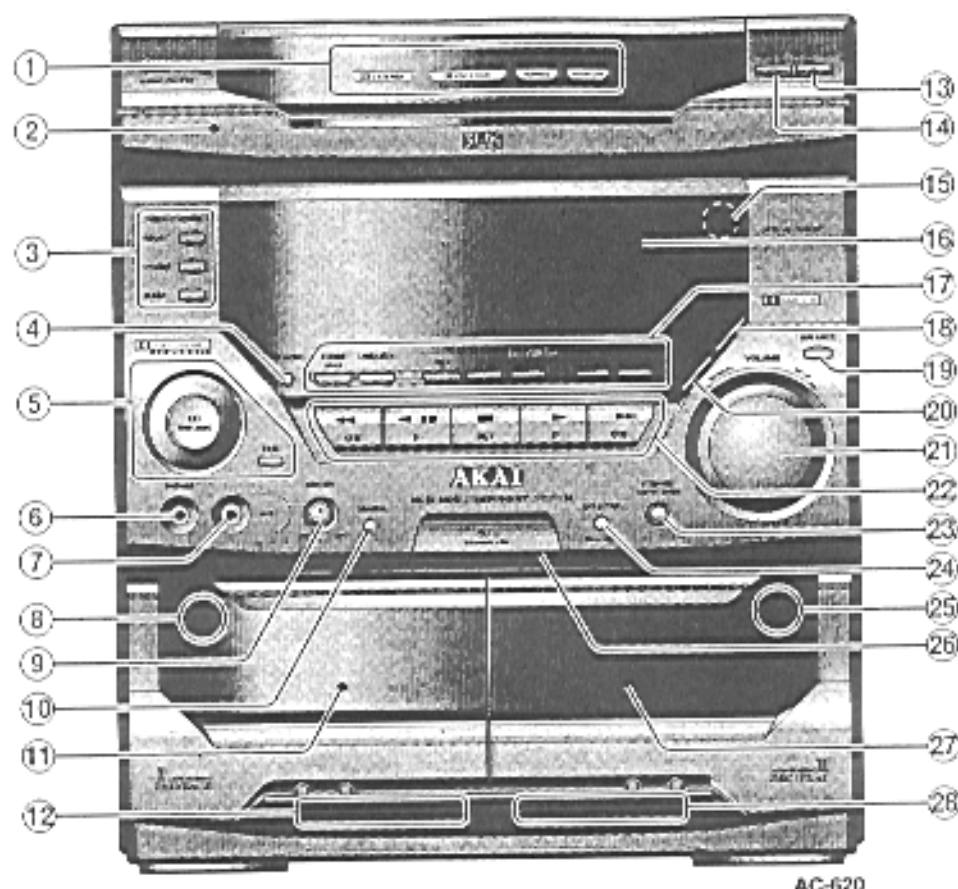
**[SPEAKER SECTION]**

|                            |                        |
|----------------------------|------------------------|
| ITEM .....                 | SR-425                 |
| System Constructions ..... | 3-way 3-speakers       |
| Woofer Unit .....          | 135mm Cone type        |
| Midrange Unit .....        | 65mm Cone type         |
| Tweeter Unit .....         | 20mm dome type (piezo) |
| System Impedance .....     | 6Ω                     |
| Maxium Power Input .....   | 80w                    |
| Sensitivity .....          | more than 87dB/w/m     |
| Frequency Response .....   | 60Hz-20KHz             |
| Harmonic Distortion .....  | less than 3%           |
| Enclosure Type .....       | bass reflex type       |
| Units Layout .....         | L/R mirror layout      |
| Dimensison .....           | 200(W)X305(H)X265(D)   |
| Net Weight .....           | 3.6Kg/pc               |

For improvement purposes, specifications and design are subject to change without notice.  
 Manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the  symbol are trademarks of Dolby Laboratories Licensing Corporation.

## CONTROLS

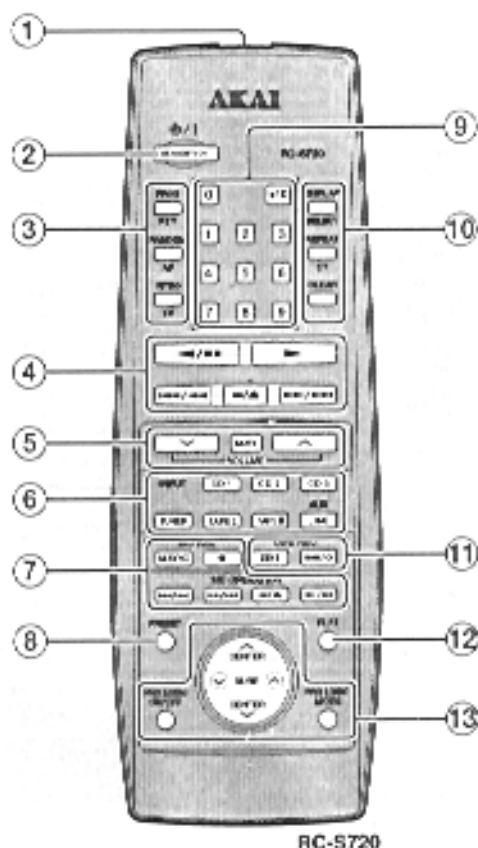
### A MAIN UNIT



AC-620

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. PRO LOGIC mode indicators (AC-620/623R/625K)</p> <ul style="list-style-type: none"> <li>☐ 3 STEREO indicators</li> <li>☐ PRO LOGIC - NORMAL indicators</li> <li>☐ PRO LOGIC - PHANTOM indicators</li> </ul> <p>2. Disc tray</p> <p>3. TIMER CONTROL buttons</p> <ul style="list-style-type: none"> <li>PROG button</li> <li>ON/OFF button</li> <li>SLEEP button</li> </ul> <p>4. CH MEMO button</p> <p>5. DOLBY PRO LOGIC operation buttons(AC-620/623R/625K only)</p> <ul style="list-style-type: none"> <li>☐ PRO LOGIC on/off button</li> <li>TEST button</li> </ul> <p>6. PHONES jack</p> <p>7. MIC jack</p> <p>8. Tape deck I PUSH OPEN button</p> <p>9. Mixing control</p> <p>10. Dimmer button</p> <p>11. Tape deck I cassette compartment</p> <p>12. Tape deck I direction indicator and transportation indicator</p> | <p>13. TRAY OPEN/CLOSE button</p> <p>14. DISC CHANGE button</p> <p>15. Remote sensor</p> <p>16. System FL display</p> <p>17. Input source select buttons(AUX is not included on the AC-420/423R/425K models)</p> <p>TUNER BAND, LINE/AUX, CD1, CD2, CD3, TAPE I, TAPE II</p> <p>18. DUB SPEEDx1/x2 button</p> <p>19. BALANCE button</p> <p>20. REC button</p> <p>21. Volume control</p> <p>22. Multi-function buttons</p> <p>23. DYNAMIC SUPER BASS button</p> <p>24. DOLBY NR button</p> <p>25. Tape deck II PUSH OPEN button</p> <p>26. STANDBY/ POWER ON button</p> <p>27. Tape deck II cassette compartment</p> <p>28. Tape deck II direction indicator and transportation indicator</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## B Remote Control



When using the remote control for operation, make sure that it is pointing to the remote sensor window on the main unit.

1. Transmitting window
2. POWER ON/STANDBY button
3. CD operation buttons/RDS buttons  
(The RDS function is only available on the AC-423R/623R)
4. Multi-function buttons
5. VOLUME buttons
6. Input source select buttons
7. MD operation buttons
  - M-SYNC buttons
  - REC button
  - ⏮/⏪ buttons
  - ⏩/⏭ buttons
  - /▲ buttons
  - ▶/⏸ buttons

8. PRESET button
9. CD/TUNER 11 KEY buttons
10. CD operation buttons/RDS buttons  
(The RDS function is only available on the AC-423R/623R)
11. TAPE REC buttons
  - ⏮/⏪ REC/PAUSE button
  - EDIT button
12. FLAT button
13. PRO LOGIC operation buttons
  - PROG LOGIC ON/OFF buttons
  - PROG LOGIC MODE button
  - CENTER ^/∨ buttons
  - SURROUND ^/∨ buttons

\* These PROG LOGIC operation buttons are not included on the RC-S520 remote control (for AC-420/423R/425K model operation)

These MD operation buttons can only be used if you have connected the optional MD recorder (MD-720).

### Note:

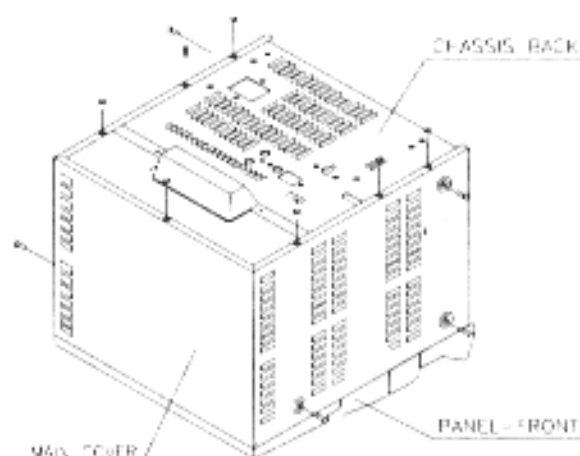
The remote control can not be used for some functions that require the combined pressing of two tape transportation buttons (intro scan or auto play for example). Please Use the Main unit's multi-function buttons for the operation of such functions.

## I. DISASSEMBLY

### 1-1. REMOVE OF MAIN COVER

- 1) Remove the seven screws on back and six screws on both sides.
- 2) Remove the MAIN COVER

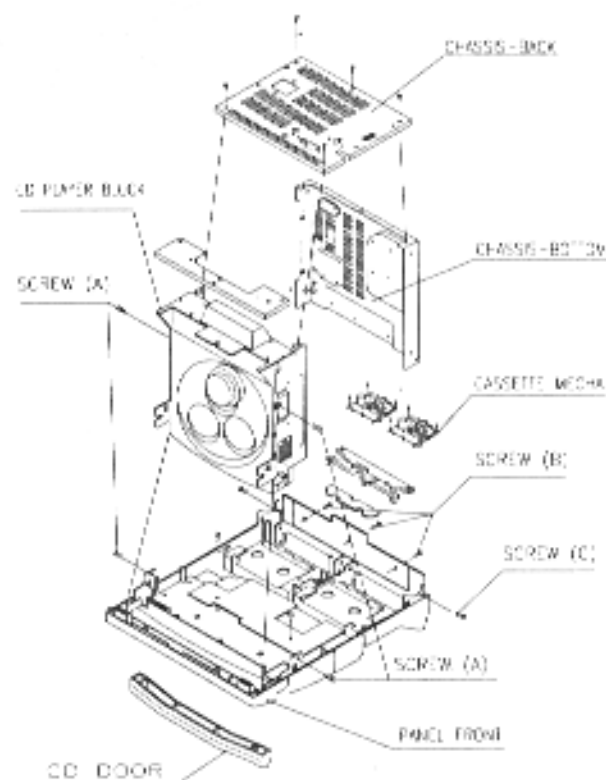
Fig. 1-1



### 1-2. REMOVE OF CD MECHA & FRONT PANEL

- 1) Remove the CD door
- 2) Remove the four screws (A) on both sides and disconnect three connectors and the flat cable from the TC-DK P.C.B
- 3) Remove the CD player block
- 4) Remove the three screws (B) and two screws (C) on both sides.
- 5) Remove the FRONT PANEL

Fig. 1-2



## II. PRINCIPAL PARTS LOCATION

---

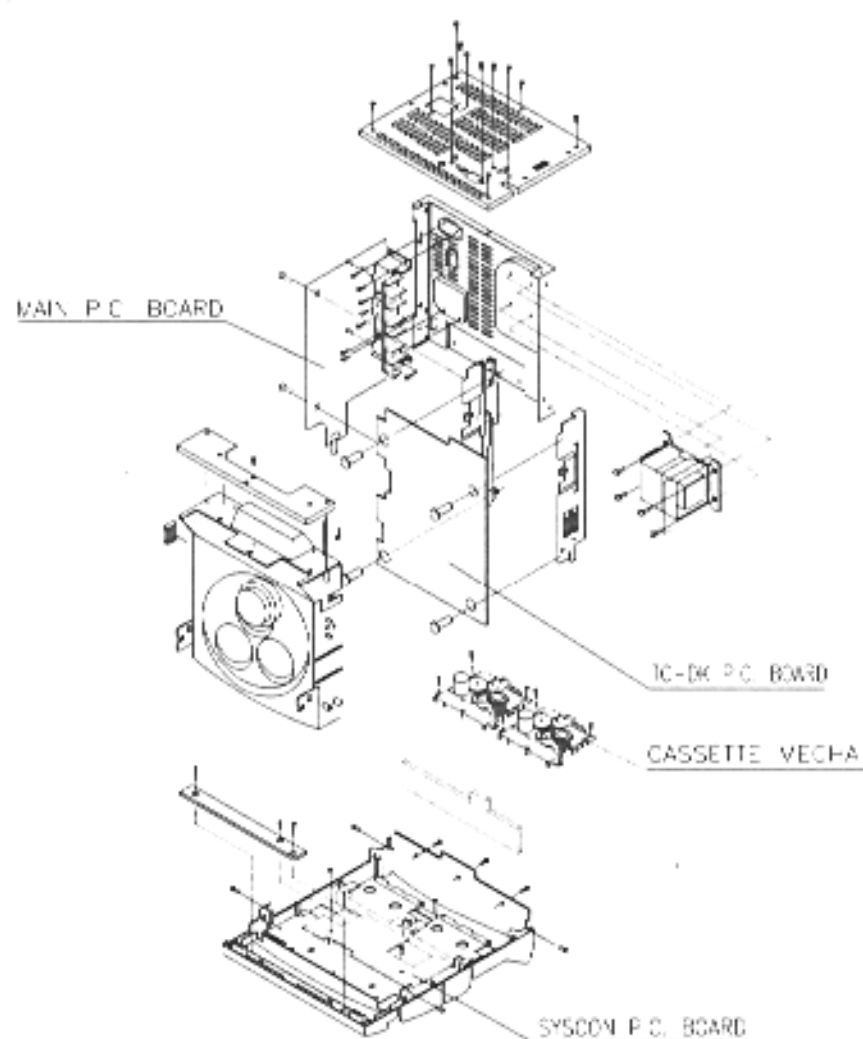


Fig. 2-1

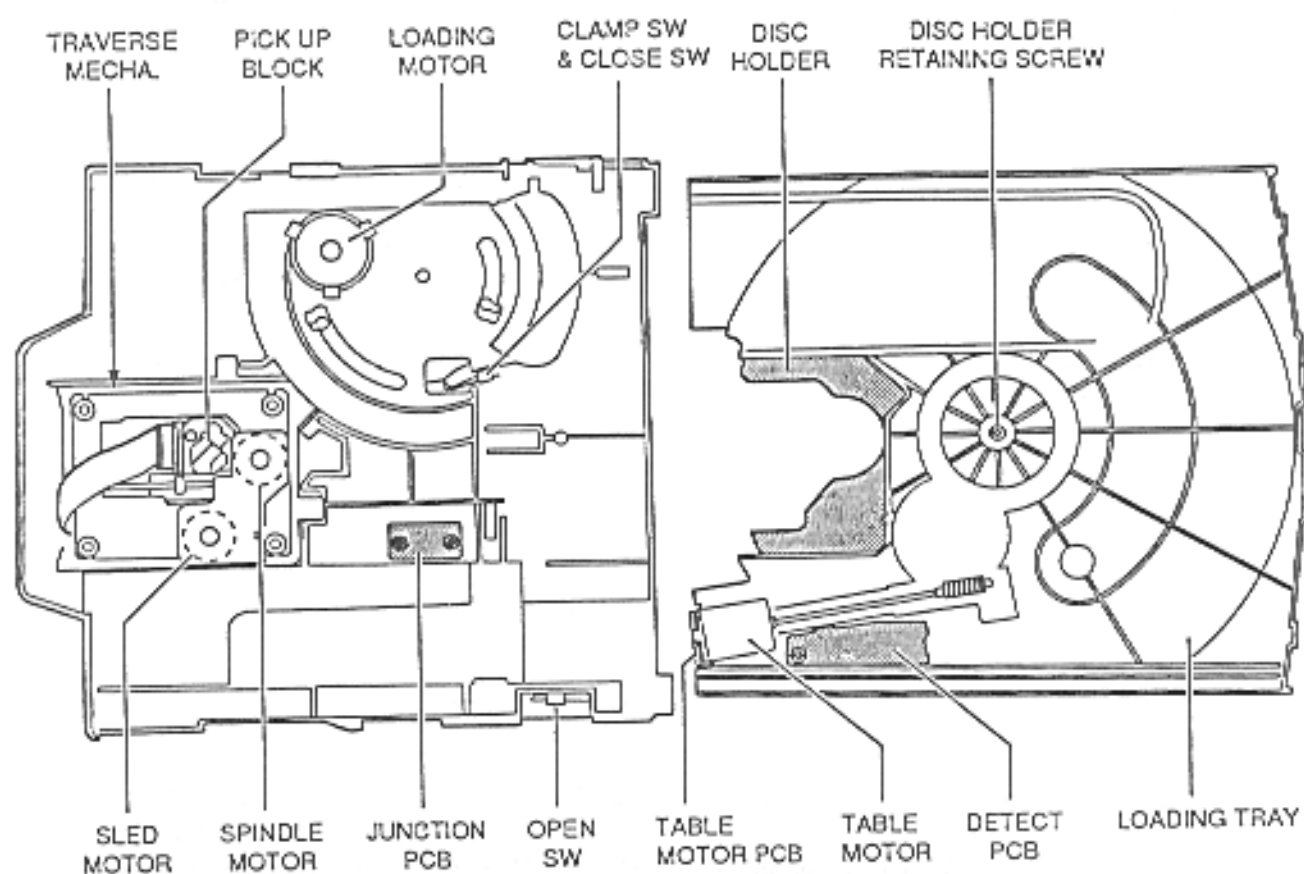


Fig. 2-2 CD PLAYER BLOCK

### III. DISASSEMBLY OF THE MAIN COMPONENTS

#### 3-1. CD PLAYER BLOCK

\* Remove the CD PLAYER BLOCK before proceeding.

##### 3-1-1. Removal of the TRAVERSE MECHA.

- 1) Remove the TRAVERSE COVER by releasing the two tabs in the direction of the arrow as shown in Fig. 3-1.

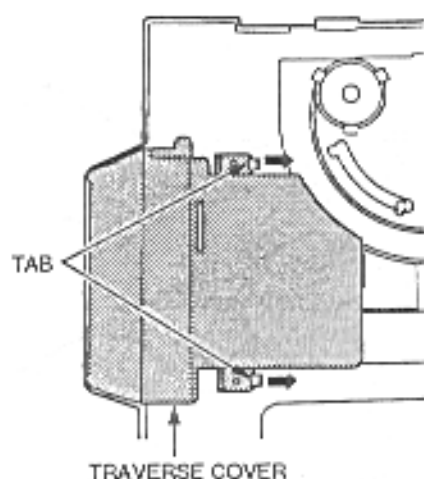


Fig. 3-1

- 2) Short the circuit on the PICK UP BLOCK with solder as shown in Fig. 3-2.

**Note:** To protect the laser diode from damage caused by high voltage static electricity, a part of the PCB on the PICK UP BLOCK has to be shorted before disconnecting the connectors. After replacement, be sure to connect the two connectors and then remove the solder of the shorted circuit before turning the power ON.

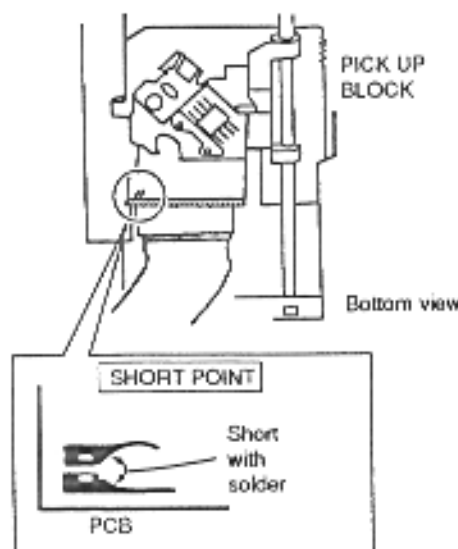


Fig. 3-2

- 3) Disconnect the two connectors carefully.

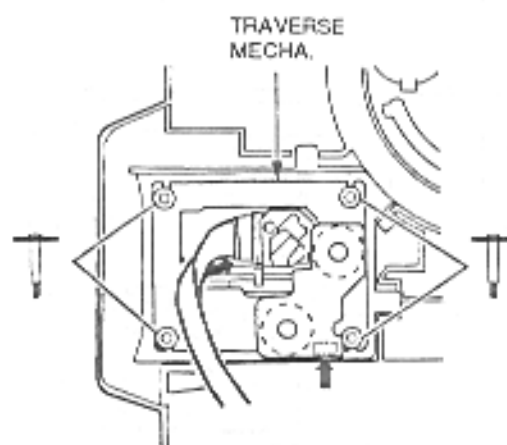


Fig. 3-3

- 4) Remove the four retaining screws, then remove the TRAVERSE MECHA.
- 5) Proceed in the reverse order for installation but never unsolder the shorted circuit before connecting the three connectors.

##### 3-1-2. Replacement of the SLED MOTOR

- 1) Remove the TRAVERSE MECHA (refer to section 3-1-1).
- 2) Unsolder the leads of the SLED and SPINDLE MOTORS then remove the MOTOR PCB.

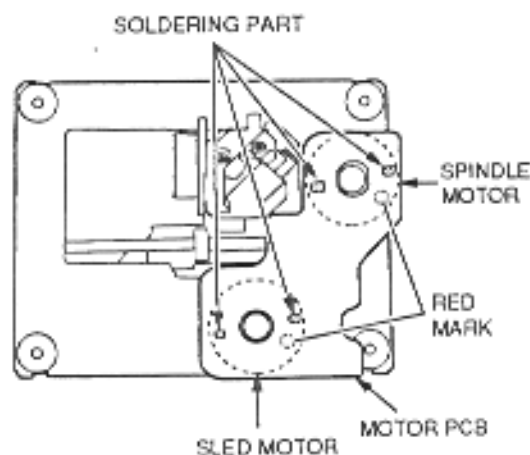


Fig. 3-4

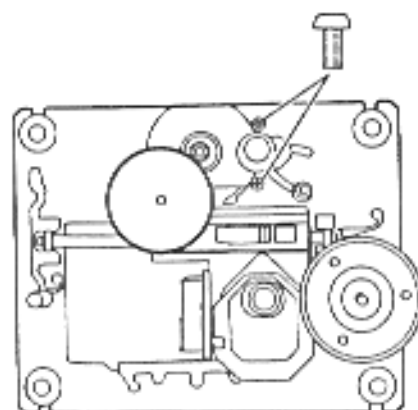


Fig. 3-5

- 3) Remove the two retaining screws, then remove the SLED MOTOR.

Next, extract the plastic gear from the motor shaft and attach it onto the new motor's shaft.

- 4) Reassemble in the reverse order.

#### About the SPINDLE MOTOR:

Replacement of the SPINDLE MOTOR itself is not recommended, because adjustment of the TURN TABLE height is quite critical and requires the use of a special jig.

### 3-1-3. Replacement of the PICK UP BLOCK

- 1) Remove the TRAVERSE MECHA (refer to section 3-1-1).
- 2) While pressing the (A) stopper upwards, pull the SLIDE SHAFT to the right to remove the PICK UP BLOCK, then replace the PICK UP BLOCK.

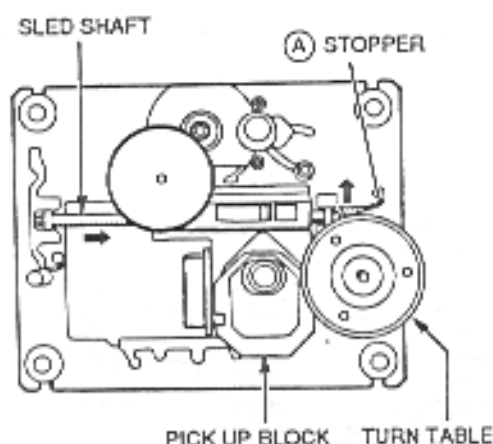


Fig. 3-6

- 3) Reassemble in the reverse order.

### 3-1-4. Replacement of the LOADING MOTOR

- 1) Slide the protruding part of the GEAR HOLDER PART in the direction of the arrow, then pull out the TRAY BLOCK.

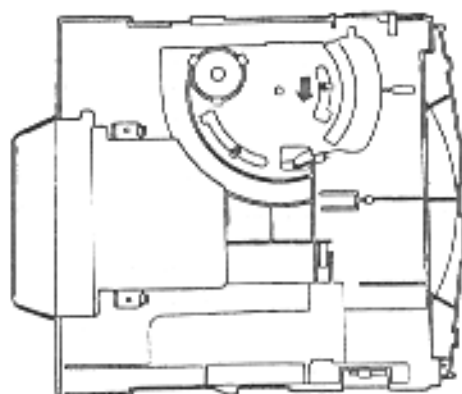


Fig. 3-7

- 2) Unhook the LOADING BELT with tweezers.

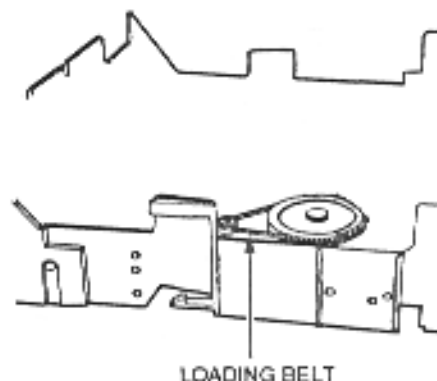


Fig. 3-8

- 3) Unsolder the lead wires of the LOADING MOTOR with a soldering iron.
- 4) While releasing the LOADING MOTOR's three retaining hooks, push the motor pulley part down with your middle finger to remove the LOADING MOTOR, then replace it.

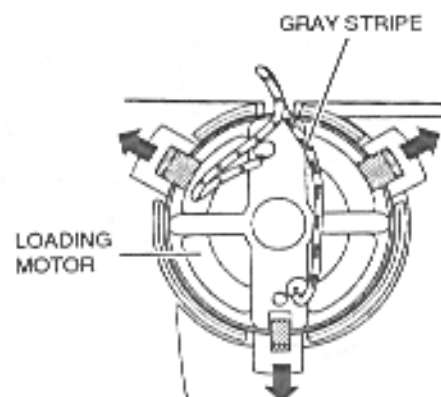


Fig. 3-9

- 5) Reassemble in the reverse order. Make sure that the wire with the gray stripe is connected to the motor's O marked terminal when soldering.

### 3-1-5. Removal of the TRAY BLOCK

- 1) If the TRAY BLOCK is in the "in" position, slide the protruding part of the GEAR HOLDER PART in the direction of the arrow and pull out the TRAY BLOCK slowly (refer to Fig. 3-7).
- 2) In order to disengage the two stoppers, carefully press the (B) part of the TRAY BLOCK downwards while pulling the TRAY BLOCK out as shown in Fig. 3-10.

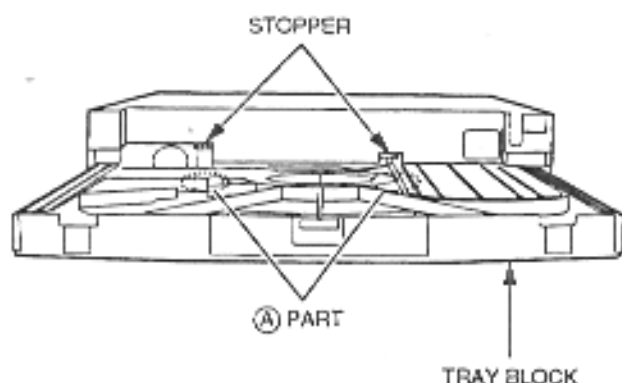


Fig. 3-10

- 4) Remove the TRAY BLOCK by pulling it out carefully.
- 5) Reassemble in the reverse order for installation. When reattaching the TRAY BLOCK to the chassis, carefully align the guides on both sides of the TRAY BLOCK with their corresponding rails on the chassis. Also, make sure that any one of the reference marks on the DISC HOLDER aligns with the reference mark on the LOADING TRAY.

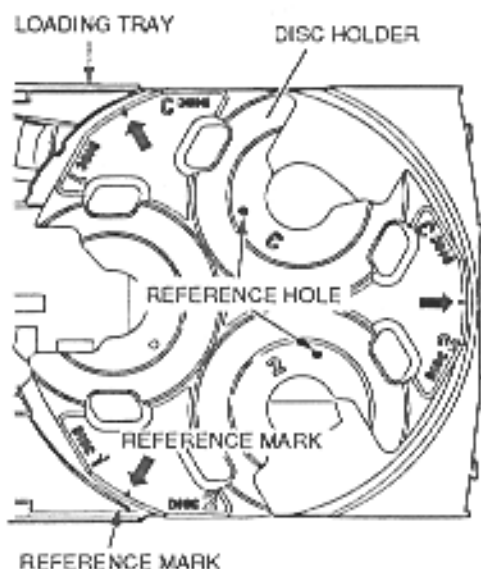


Fig. 3-11

Next, move the head of the GEAR HOLDER PART in the direction of the arrow before engaging the stoppers as shown in Fig. 3-12.

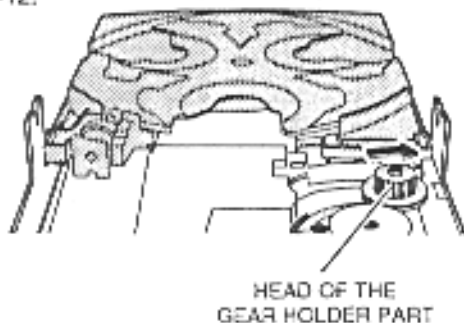


Fig. 3-12

### 3-1-6. Replacement of the TABLE MOTOR

- 1) Remove the TRAY BLOCK (refer to section 3-1-5).
- 2) Remove the DISC HOLDER retaining screw then remove the DISC HOLDER.

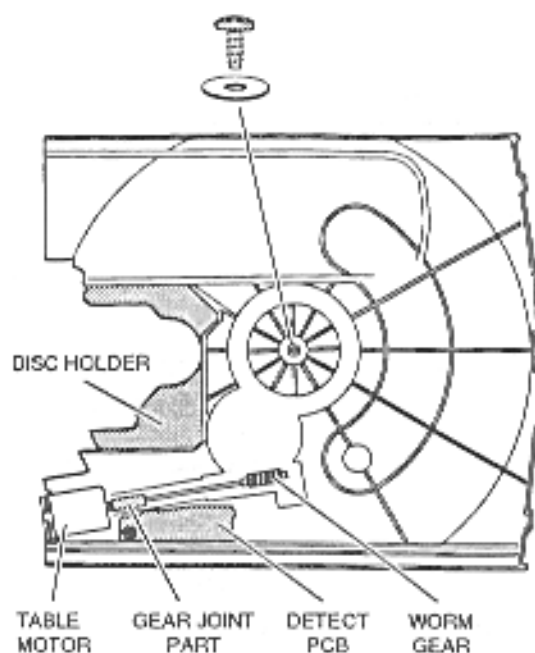


Fig. 3-13

- 3) Unsolder the leads of the TABLE MOTOR and remove the TABLE MOTOR PCB.

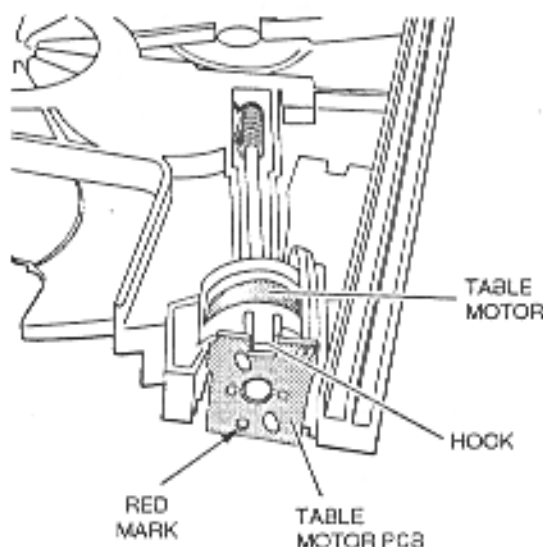


Fig. 3-14

- 4) Remove the TABLE MOTOR by pulling it out while opening the TABLE MOTOR retaining hook. Next, remove the WORM GEAR BLOCK by pulling the GEAR JOINT PART out and attach it to the new motor as shown in Fig. 3-13.
- 5) Reassemble in the reverse order.
  - When soldering the TABLE MOTOR PCB on the TABLE MOTOR, the TABLE MOTOR's red mark must be visible through the hole on the TABLE MOTOR PCB.
  - When attaching the DISC HOLDER on the LOADING TRAY, make sure to place the DISC HOLDER so that any one of the three reference marks aligns with the reference mark on the LOADING TRAY (any two reference holes on the DISC HOLDER align with the corresponding reference holes on the LOADING TRAY accordingly). (Refer to Fig. 3-11)

### 3-2. TAPE-I & TAPE-II MECHANISM BLOCK

\* If CASSETTE MECHANISM BLOCK removal is intended, press both the "EJECT" buttons on the FRONT PANEL to open the CASSETTE HOLDERS and CASSETTE DOOR before proceeding (AC-600/603R/605K only).

#### 3-2-1. Removal of the MECHANISM BLOCK

- 1) Remove the FRONT PANEL BLOCK.
- 2) Remove the four screws for each of the TAPE-I and TAPE-II MECHANISM BLOCKs then remove the MECHANISM BLOCKs from the FRONT PANEL BLOCK.

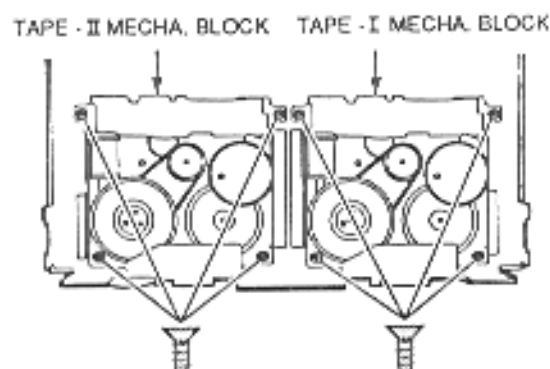


Fig. 3-15

#### 3-2-2. Replacement of the CAPSTAN MOTOR

NOTE : After replacement, tape speed adjustment must be performed.

- 1) Unsolder the flat cable on the CAPSTAN MOTOR with a soldering iron.
- 2) While pressing the INTER-LOCK LEVER in the direction of the arrow, remove the two (B) screws and then remove the CAPSTAN MOTOR.

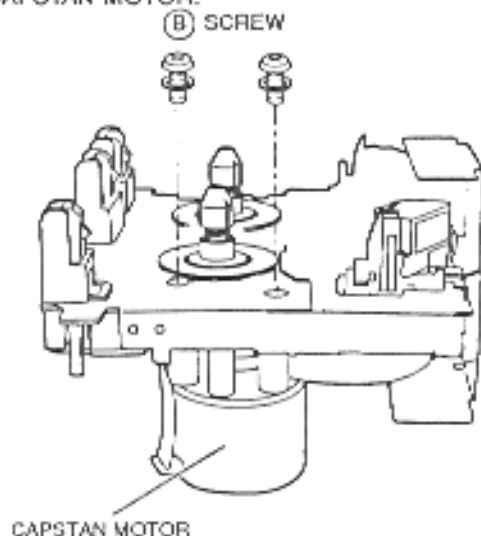


Fig. 3-16

- 3) Install a new motor and re-assemble in the reverse order for installation.

#### 3-2-3. Replacement of the FR BELT

- 1) Unthread the MAIN BELT and replace the FR BELT as shown in Fig. 3-17.
- 2) Proceed in the reverse order for installation.

#### 3-2-4. Replacement of the MAIN BELT

- 1) Remove the CAPSTAN MOTOR
- 2) Replace the MAIN BELT and re-assemble in the reverse order for installation.

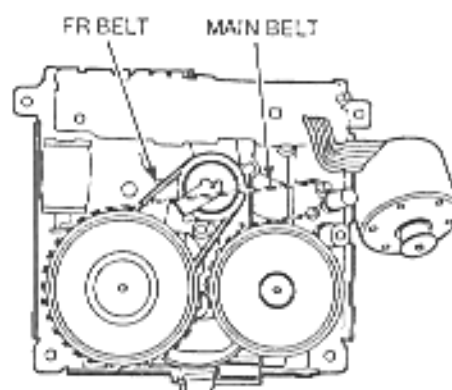


Fig. 3-17

- 3) After replacement, check the tape speed and if the result is not satisfactory, tape speed adjustment must be performed.

#### 3-2-5. Replacement of the PINCH ROLLER BLOCK

- 1) Extract the PINCH ROLLER BLOCK upwards while releasing the pinch roller retaining hook in the direction of the arrow.

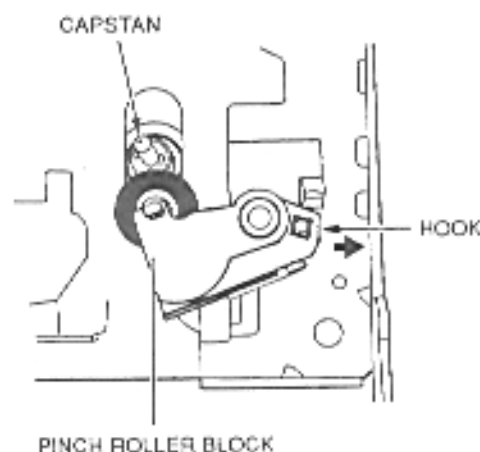


Fig. 3-18

- 2) Replace the PINCH ROLLER BLOCK and re-assemble in the reverse order. Attach the spring in the correct position when placing the PINCH ROLLER BLOCK.

### 3-2-6. Replacement of the PB HEAD OR REC/PB HEAD

- 1) Remove the two (A) screws and remove the HEAD SHIELD PLATE.

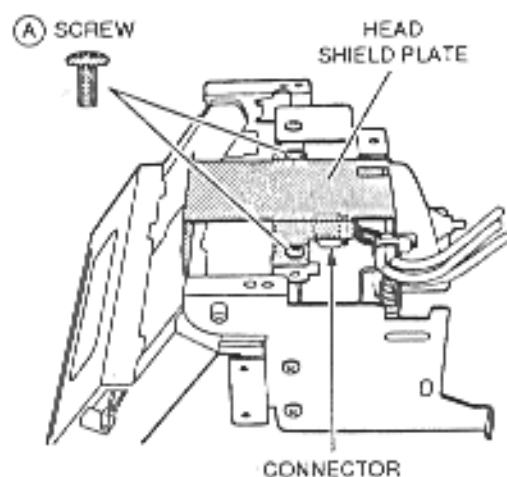


Fig. 3-19

- 2) Disconnect the connector on the CONNECTOR PCB and remove the PCB retaining screw.

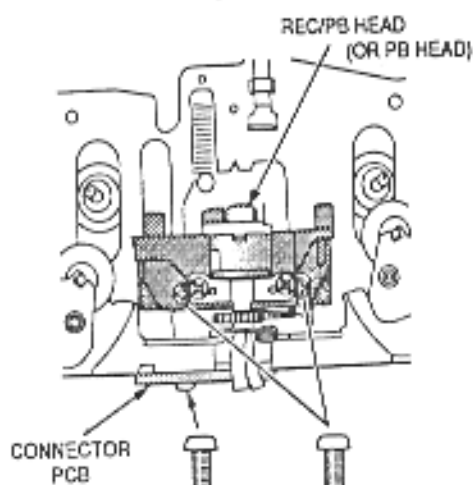


Fig. 3-20

- 3) Remove the two head retaining screws and remove the HEAD BLOCK.
- 4) Reassemble in the reverse order. After replacement, demagnetize the HEAD then perform head azimuth adjustment.

## IV. MECHANICAL ADJUSTMENT

### 4-1. ADJUSTMENT OF THE HEAD AZIMUTH ALIGNMENT

- 1) Connect an oscilloscope to the L-ch and R-ch LINE terminals of the unit.
- 2) Play back a 10 kHz (-15 dB), HEAD AZIMUTH ALIGNMENT TEST TAPE (TF-106CH) then adjust the HEAD AZIMUTH ALIGNMENT Ⓐ (FWD PLAY) and Ⓑ (REV PLAY) SCREWS respectively so that the waveform level of both the L-ch and R-ch are at maximum and also they are in the same phase in both FWD and REV directions. (Use a sharp edge philips type screwdriver that is de-magnetized for adjustment.)  
Perform the adjustment on both the TAPE-I and TAPE-II heads if necessary.

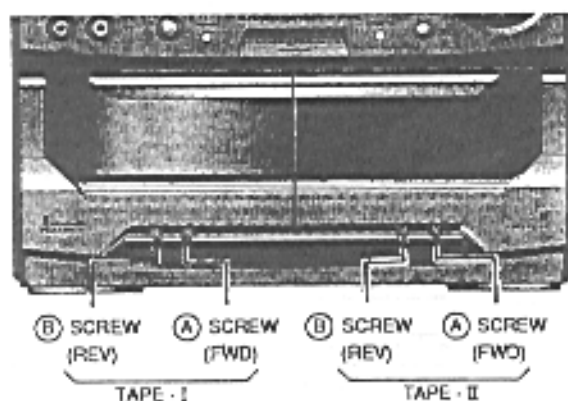


Fig. 4-1

# V. ELECTRICAL ADJUSTMENT

## 5-1. TAPE DECK SECTION

### NOTE :

- 1) The following adjustment should be performed in the "DECK test mode".  
To engage the DECK test mode, connect the AC power cord to the AC outlet while pressing the "TAPE-II" and "▶ ( F )" buttons together.  
When the "DECK test mode" is engaged, the "DUBX1" indicator on the FL display will light.
- 2) When performing the tape speed adjustment, observe the following notes.
  - Adjustment should be started more than 30 seconds after the power is switched ON.
  - Adjustment should be made on X2 speed mode first then adjust the normal speed mode.
  - Adjustment should be made in the forward direction.
- 3) To disengage the "DECK test mode", press the "POWER" button or unplug the AC power cord from the AC outlet.

### STEP ADJUSTMENT

1. Test tape/input signal
2. Mode
3. Check point, adjustment part
4. Remarks (•) and result (\*)

Adjustment Part

Test Point

### 1 TAPE-I (X2) TAPE SPEED

1. 3,150 Hz test tape (TF-110CT)
2. TAPE-I, PLAY
3. LINE OUT, VR3100
4. • Connect a frequency counter to the LINE OUT (L or R) and press the "DUBBING" button to engage double speed.  
\* 6,340 ± 20 Hz

### 2 TAPE-I NORMAL TAPE SPEED

1. 3,150 Hz test tape (TF-110CT)
2. TAPE-I, PLAY
3. LINE OUT, VR3101
4. • Connect a frequency counter to the LINE OUT and press the "▶ ( F )" button again to resume normal tape speed.  
\* 3,150 ± 10 Hz

### 3 TAPE-II (X2) TAPE SPEED

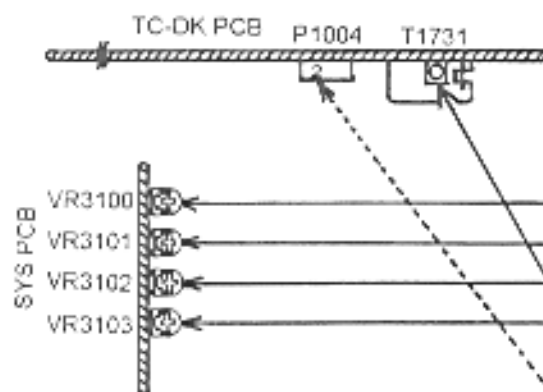
1. 3,150 Hz test tape (TF-110CT)
2. TAPE-II, PLAY
3. LINE OUT, VR3102
4. • Press the "TAPE-II" button and play back the test tape.  
• Connect a frequency counter to the LINE OUT and press the "DUBBING" button to engage double speed.  
\* 6,320 ± 20 Hz

### 4 TAPE-II NORMAL TAPE SPEED

1. 3,150 Hz test tape (TF-110CT)
2. TAPE-II, PLAY
3. LINE OUT, VR3103
4. • Connect a frequency counter to the LINE OUT and press the "▶ ( F )" button again to resume normal tape speed.  
\* 3,140 ± 10 Hz

### 5 BIAS OSC FREQUENCY

1. CrO2 type blank tape
2. TAPE-II, REC
3. P1004 ② pin, T1731
4. • Connect a frequency counter between P1004 pin and GND. (10 : 1 probe should be used to avoid affecting the measurement.)  
• Start a recording (press the "REC" button then press the "▶" button).  
The "AUX" source indicator appears automatically.  
\* 100.0 ± 0.2 kHz



## 5-2.CD PLAYER SECTION

### TEST MODE FOR CD PLAYER'S OPERATION

Some adjustments of the CD PLAYER section are automatically carried out by the micro computer.

If the CD player section is defective and it is necessary to partially check the operation, "CD TEST" mode can be used while repairing.

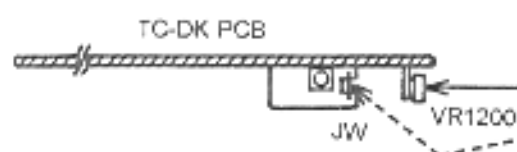
#### Engaging the "CD TEST" MODE

While pressing and holding both the "CD1" and "E/F" buttons, plug in the AC power cord to the AC outlet

Note :

- During "CD TEST" mode, only the DISC\*1  $\blacktriangle$  open/close button can be used for loading. So, place a disc on "TRAY 1".
- Proceed testing by pressing the "CD1" button once for each testing step
- To disengage the "CD TEST" mode, press the "POWER ON/STANDBY" button or disconnect the AC power cord from the AC outlet.

| DISPLAY     | FUNCTION                                                                                          |
|-------------|---------------------------------------------------------------------------------------------------|
| T0 (TEST-0) | Initial condition of the "CD TEST" mode.                                                          |
| T1 (TEST-1) | Perform "focus search"                                                                            |
| T2 (TEST-2) | Turn on the "focus servo".                                                                        |
| T3 (TEST-3) | Mode of the "E-F balance" adjustment.                                                             |
| T4 (TEST-4) | E-F balance adjustment is carried out automatically and its data value is displayed on the FLD.   |
| T5 (TEST-5) | Mode of the "Tracking gain" adjustment.                                                           |
| T6 (TEST-6) | Tracking gain adjustment is carried out automatically and its data value is displayed on the FLD. |
| T7 (TEST-7) | Normal playback mode is engaged.                                                                  |



#### 1 FOCUS OFFSET

1. Test disc (SONY TYPE-III)
2. Play back
3. JW and VR1200
4. Connect the hot side probe of an AC millivoltmeter to JW on the BIAS OSC PCB and GND side probe to the chassis. Adjust the VR1200 on the TC-DK PCB until indication of the AC millivoltmeter is maximum.

## VI. 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 nondelivery 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.

### [NOTE]

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.

### WARNING

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

### AVEERTISSEMENT

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

## 1. REMOTE P.C. BOARD

| REF. NO. | PARTS No.      | DESCRIPTION                         |
|----------|----------------|-------------------------------------|
| CF001    | 007-300455-46  | RESONATOR CRK455 455KHz             |
| IC001    | 033-806122-13  | REMOTE TRANSMITTER UPD6122G-001     |
| LED001   | 130-670303-00  | INFRA RED EMITINT DIODE EL-1L1      |
| PCB      | 090-010302-04  | REMOTE BOARD T=1.6mm 94HB(46X119mm) |
| Q001     | 031-278050-03  | TRANSISTOR NPN KTC8050C             |
| D001-004 | 030-134148-00H | D SILICON IN4148                    |
|          | 210-010301-01S | REMOTE BATTERY COVER                |

## 2. SYS CON P.C. BOARD

| REF. NO.                             | PARTS No.      | DESCRIPTION                       |
|--------------------------------------|----------------|-----------------------------------|
| D3001-3015/3080-3087                 | 030-320131-01H | D SILICON H 1SS131T T52           |
| D3102-3112/3121-3124                 |                |                                   |
| D3016/3017/3120( for AC-620)         | 030-320131-01H | D SILICON H 1SS131T T52           |
| D3113(AC-420/620 S1 AC-425K/625K Y7) | 030-320131-01H | D SILICON H 1SS131T T52           |
| D3114/3117(for AC-425/625K)          | 030-320131-01H | D SILICON H 1SS131T T52           |
| D3115(for AC-420/620 S1)             | 030-320131-01H | D SILICON H 1SS131T T52           |
| D3116(for AC-423/623RE1)             | 030-320131-01H | D SILICON H 1SS131T T52           |
| D3119(AC-420/620 E1/E2/E3/B1/RE1)    | 030-320131-01H | D SILICON H 1SS131T T52           |
| D3027-3031/3037/3038/3040-3044/3052/ | 030-560034-10  | D LED MYB34C YELLOW               |
| D3053/3055/3056                      |                |                                   |
| D3026-3029/3036/3039/3042/3051/3054  | 030-540034-04  | D LED MGB34D GREEN                |
| D3200-3211                           |                |                                   |
| D3020/3024/3025/3032-3035/3045-3049  | 030-560031-00  | D LED MYB31CA YELLOW              |
| D3021-3023                           | 030-510031-00  | D LED MSB31TA RED                 |
| D3301/3302/3305-3307                 | 030-540034-04  | D LED MGB34D GREEN                |
| (for AC-620/623R/625K)               |                |                                   |
| D3303/3304(for AC-620/623R/625K)     | 030-560034-10  | D LED MYB34C YELLOW               |
| IC3001                               | 034-801901-12  | IC M38197MA-173FP TX3-SYS74-1     |
| IC3002                               | 033-509121-29  | IC PST-9121 T05                   |
| IC3003                               | 033-002401-42  | IC XL24C01AP                      |
| IC3004                               | 033-202011-14  | IC TA2011S                        |
| IC3005-3007/3200                     | 034-304094-18  | IC BU4094BCF                      |
| IC3301(for AC-620/623R/625K)         | 034-304094-18  | IC BU4094BCF                      |
| IC3100                               | 033-304094-18A | IC BU4094BC                       |
| IC3101(for AC-423/623R)              | 034-106579-33  | IC SAA6579T-T                     |
| IC3102(for AC-423/623R)              | 034-307073-16  | IC LC7073M                        |
| IN3001                               | 035-131610-00  | IND FL SVA-16MM1D                 |
| J 3401                               | 061-121406-00  | PHONE J HSJ1406-01-010 3.5        |
| J 3402(for AC-425/625K)              | 061-121406-00  | PHONE J HSJ1406-01-010 3.5        |
| J 3003/3033                          | 060-406123-99  | SOCKET 00 6216 006 000 6P         |
| J 3022                               | 060-423124-99  | SOCKET 00 6216 023 100 23P        |
| J3906-3907                           | 060-615125-07  | SOCKET 15FE-BT-VK-N 15P           |
| P 3301(AC-420/423R/425K)             | 060-103204-07  | PLUG S3B-PH-K WHT 3P              |
| P 3301A(AC-620/623R/625K)            | 060-108204-07  | PLUG S8B-PH-K WHT 8P              |
| P 3011                               | 060-422124-99  | PLUG TKC-V22P-A1 22P              |
| PH3001                               | 036-600446-01  | DETECTOR SPS-446-1                |
| SW3001                               | 040-002410-20  | SW ROTARY EC16B24304              |
| SW3002                               | 046-080001-00  | SW PUSH VPS-800                   |
| TR3003-3005/3125-3126                | 031-440144-05V | DTR DTC144ES(47-47) T05           |
| TR3101/3103/3113-3120/3122-3123      | 031-211048-25V | TR 2SA1048 Y,GR T05               |
| TR3100/3102/3104-3106                | 031-224682-00V | TR 2SC4682                        |
| TR3111(for AC-423RE1/623RE1)         | 031-211048-25V | TR 2SA1048 Y,GR T05               |
| TR3112(for AC-423RE1/623RE1)         | 031-440144-05V | DTR DTC144ES(47-47) T05           |
| TS3001-3004/3011-3301                | 046-110201-00  | SW TACT 1.T-1102A 160GM           |
| TS3005/3009                          | 046-110201-00  | SW TACT 1.T-1102A 160GM           |
| VR3001                               | 011-202298-00  | VR ROTARY RK11K1140 L17.5 B202    |
| VR3101/3103                          | 112-102311-05  | R S-FIX V T05 EVND CAA 30.10W 102 |
| VR3100/3102                          | 112-222311-05  | R S-FIX V T05 EVND CAA 30.10W 222 |

|                           |                |                                |
|---------------------------|----------------|--------------------------------|
| W 3001(AC-420/423R/425K)  | 063-552701-03  | WA PH-SAN L270 3P              |
| W 3001A(AC-620/623R/625K) | 063-552701-03  | WA PH-SAN L270 3P              |
| W 3007                    | 077-622107-16  | WF 2468#26 P2.0 C09 L100 16P   |
| W 3008                    | 077-622107-15  | WF 2468#26 P2.0 C09 L100 15P   |
| W 3011                    | 077-622107-05  | WF 2468#26 P2.0 C09 L100 5P    |
| W 3401                    | 078-125021-00  | WA EARTH LUG L=200             |
| X 3001                    | 007-208000-06  | OSC CE CST8.00MTW 8 000MHZ     |
| X 3002                    | 037-032768-10M | OSC X'TAL C-002RX 32.768KHZ    |
| X 3100(for AC-423/623R)   | 007-204000-06  | OSC CE CST4.00MGW 4.000MHZ     |
| X 3101(for AC-423/623R)   | 037-004332-10Z | OSC X'TAL HC-49/U-S 4.33200MHZ |

### 3. MAIN P.C. BOARD

| REF. NO.                                        | PARTS No.      | DESCRIPTION                    |
|-------------------------------------------------|----------------|--------------------------------|
| D 001(AC-620/623R/625K)                         | 030-310040-02  | D SILICON DBF40C 200/4.0A      |
| D 002(AC-620/623R/625K)                         | 030-310040-02  | D SILICON DBF40C 200/4.0A      |
| D 003-004/025(AC-620/623R/625K)                 | 030-410056-30H | D ZENER MTZJ5.6C T52           |
| D 005-008(AC-620/623R/625K)                     | 030-310152-06  | D SILICON RL152M11S15 100/1.5A |
| D 006-009(AC-420/423R/425K)                     | 030-310152-06  | D SILICON RL152M11S15 100/1.5A |
| D 021/023/081/086/087/                          | 030-314002-10H | D SILICON 1N4002-F T52 100/1A  |
| D 231/232(AC-420/423R/425K)                     |                |                                |
| D 021/023/081-083/141(AC-620/623R/625K)         | 030-314002-10H | D SILICON 1N4002-F T52 100/1A  |
| D 001/022/024/042/044/046/083/                  | 030-320131-01H | D SILICON H 1SS131T T52        |
| D 121-124/141-143/221/724<br>(AC-420/423R/425K) |                |                                |
| D 022/024/041-042/047/130-131/135-136           | 030-320131-01H | D SILICON H 1SS131T T52        |
| D 133/142/153-154/156-157                       |                |                                |
| D 322/724(AC-620/623R/625K)                     |                |                                |
| D 025/063/066/145/721-723/                      | 030-410062-10H | D ZENER MTZJ6.2A T52           |
| D 751-753(AC-420/423R/425K)                     |                |                                |
| D 043/062/721-723(AC-620/623R/625K)             | 030-410062-10H | D ZENER MTZJ6.2A T52           |
| D 041                                           | 030-410075-10H | D ZENER MTZJ7.5C T52           |
| D 044/151-152(AC-620/623R/625K)                 | 030-410075-10H | D ZENER MTZJ7.5C T52           |
| D 004/005/043/085/144<br>(AC-420/423R/425K)     | 030-410051-20H | D ZENER MTZJ5.1B T52           |
| D 045(AC-620/623R/625K)                         | 030-410051-20H | D ZENER MTZJ5.1B T52           |
| D 046(AC-620/623R/625K)                         | 030-410015-03H | D ZENER MTZJ15B T52            |
| D 084                                           | 030-410330-00H | D ZENER MTZJ33B T52            |
| D 085(AC-620/623R/625K)                         | 030-410056-20H | D ZENER MTZJ5.6A T52           |
| D 132/134(AC-620/623R/625K)                     | 030-410220-00H | D ZENER MTZJ22D T52            |
| D 155(AC-620/623R/625K)                         | 030-410051-10H | D ZENER MTZJ5.1A T52           |
| D 531-533/551-554(for AC-625K)                  | 030-320131-01H | D SILICON H 1SS131T T52        |
| D 551-554(for AC-425K)                          | 030-320131-01H | D SILICON H 1SS131T T52        |
| F1(for AC-420/423R/425K)                        | 082-221600-06  | FUSE TIME 218 250V 1.6A        |
| F2(for AC-425K)                                 | 082-221600-06  | FUSE TIME 218 250V 1.6A        |
| F1(for AC-620/623R/625K)                        | 082-222000-06  | FUSE TIME 218 250V 2.00A       |
| F2(for AC-625K)                                 | 082-222000-06  | FUSE TIME 218 250V 2.00A       |
| F3(for AC-620/623R/625K)                        | 082-225000-06  | FUSE TIME 218 250V 5.00A       |
| F4(for AC-620/623R/625K)                        | 082-225000-06  | FUSE TIME 218 250V 5.00A       |
| IC 021                                          | 033-507805-00B | IC ML7805FA 5V/1A              |
| IC 201(AC-420/423R/425K)                        | 030-404142-16  | IC STK4142-2                   |
| IC 202/203/204(AC-620/623R/625K)                | 033-218751-38  | IC S118751                     |
| IC 501                                          | 033-K65843-12  | IC M65843AFP                   |
| IC 581                                          | 033-904558-30A | IC NJM4558L                    |
| IC 602(for AC-620/623R/625K)                    | 034-K02177-74  | IC NJM2177AFB3                 |
| IC 701                                          | 034-262422-12  | IC M62422FP                    |
| IC 751/761 (for AC-620/623R/625K)               | 033-209412-14  | IC TC9412P                     |
| IC 761 (for AC-420/423R/425K)                   | 033-209260-14  | IC TC9260P                     |
| IC 101(for AC-420/423R/425K)                    | 033-304094-18A | IC BU4094BC                    |
| IC 801                                          | 033-304094-18A | IC BU4094BC                    |

|                                                      |                 |                                |
|------------------------------------------------------|-----------------|--------------------------------|
| IC 802 (for AC-620/623R/625K)                        | 033-304094-18A  | IC BU4094BC                    |
| J 011                                                | 060-422122-99   | SOCKET TKC-V22X-A1 22P         |
| J 201                                                | 061-123000-00   | PHONE J HSJ3000-01-010 3.5     |
| J 301 (only for AC-620/623R/625K)                    | 061-780243-00   | PIN J HSP-243V-06 3P           |
| L 201/251(AC-420/423R/425K)                          | 004-285103-08   | COIL 202AK018K COILS           |
| L 281(AC-420/423R)                                   | 0844-070410-00  | COIL BALUM OPW/S-8-14-5H2      |
| L 202(for 620/623R)                                  | 084-070410-00   | COIL BALUM OPW/S-8-14-5H2      |
| L 203(for AC-620/623R)                               | 084-070410-00   | COIL BALUM OPW 15-8-14-5H2     |
| L 801                                                | 002-300002-09   | COIL LF LF-4D-102 102UH        |
| P 006(for AC-420/423R/425K)                          | 060-112204-07   | PLUG S12B-PH-K WHT 12P         |
| P 006(for AC-620/623R/625K)                          | 060-116204-07   | PLUG S16B-PH-K WHT 16P         |
| P 012(AC-420/423R/425K)                              | 060-102045-20   | PLUG B2P-3-VH P7.92 2P         |
| P 012(for AC-620/623R/625K)                          | 060-107204-07   | PLUG S7B-PH-KWHT 7P            |
| P 013(for AC-420/423R/425K)                          | 060-403001-17   | PLUG RB-115-3P 3P              |
| P 013(for AC-620/623R/625K)                          | 060-107045-20   | PLUG PS2438-7 7P               |
| P 014(AC-420/423R/425K)                              | 060-104205-27   | PLUG B4B-PH-K WHT 4P           |
| P 801(AC-620/623R/625K)                              | 060-102045-20   | PLUG B2P-3-VH P7.92 2P         |
| P 902(AC-420/423R/425K)                              | 060-403001-17   | PLUG RTB-1.5-SP 3P             |
| R 004-005/043                                        | ⚠ 013-478205-75 | R OMF H S10FLR ERG12SP1/2WR47J |
| R 021/103/106/109/112                                | ⚠ 013-109205-75 | R OMF H S10FLR ERG12SP1/2W1R0J |
| R 080(AC-620/623R/625K)                              | ⚠ 013-109205-75 | R OMF H S10FLR ERG12SP1/2W1R0J |
| R 081(AC-420/423R/425K)                              | ⚠ 013-478205-75 | R OMF H S10FLR ERG12SP1/2WR47J |
| R 047-048                                            | ⚠ 013-221205-75 | R OMF H S10FLR ERG12SP1/2W221J |
| R 060-063(AC-620/623R/625K)                          | ⚠ 013-392205-75 | R OMF H S10FLR ERG12SP1/2W392J |
| R 061/062-064(AC-420/423R/425K)                      | ⚠ 013-102205-2A | R OMF H S10FLR ERG12SP1/2W102J |
| R 132/135-136/141(AC-620/623R/625K)                  | ⚠ 013-151205-75 | R OMF H S10FLR ERG12SP1/2W151J |
| R 137(AC-620/623R/625K)                              | ⚠ 013-478205-75 | R OMF H S10FLR ERG12SP1/2W562J |
| R 213/263/233/283<br>(for AC-620/623R/625K)          | ⚠ 013-479305-75 | R OMF H S12 FLR ERG1SP 1W 4R7J |
| R 209/210/259/260(AC-420/423R/425K)                  | 013-478205-075  | R OEM H SLOFER ERG15P 1W 100J  |
| RL001                                                | ⚠ 066-110212-04 | RELAY POWOSA-SS 212DM5 TV-3    |
| TM 201                                               | 061-780401-00   | TERMINAL PUSH C.J-9007-060 4P  |
| TR 022/024/026/043                                   | 031-440114-05V  | DTR DTC114ES(10-10) T05        |
| TR 131(AC-620/623R/625K)                             | 031-440114-05V  | DTR DTC114ES(10-10) T05        |
| TR 221(AC-420/423R/425K)                             | 031-440114-05V  | DTR DTC114ES(10-10) T05        |
| TR 023(for AC-420/423R/425K)                         | 031-221443-00V  | TR 2SB1443 TV2                 |
| TR 023(for AC-620/623R/625K)                         | 031-220621-00V  | TR2SB621 R,S T05               |
| TR 025                                               | 031-220621-00V  | TR 2SB621 R,S T05              |
| TR 021/041/082/101-104                               | 031-211048-25V  | TR 2SA1048 Y,GR T05            |
| TR 130/132(AC-620/623R/625K)                         | 031-211048-25V  | TR 2SA1048 Y,GR T05            |
| TR 044/081                                           | 031-221375-00   | TR 2SB1375                     |
| TR 061(AC-620/623R/625K)                             | 031-440114-60V  | DTR DTC114TS(10) T05           |
| TR 121-124(AC-420/423R/425K)                         | 031-440114-60V  | TR DTC114JS107 T05             |
| TR 134(for AC-610/613R/615K)                         | 031-241785-00   | TR 2SD1785                     |
| TR 045/135/151/152/154/155/201/251                   | 031-232458-25V  | TR 2SC2458 Y,GR T05            |
| TR 221/271(AC-620/623R/625K)                         |                 |                                |
| TR 045/141/201-203/251-253<br>(for AC-420/423R/425K) | 031-232458-25V  | TR 2SC2458 Y,GR T05            |
| TR 137(for AC-620/623R/625K)                         | 031-221258-00   | TR 2SB1258                     |
| TR 153(for AC-620/623R/625K)                         | 031-430114-19V  | DTR DTA114TS(10) T05           |
| TR 158(for AC-620/623R/625K)                         | 031-440114-60V  | DTR DTC114TS(10) T05           |
| TR 320/321(for AC-620/623R/625K)                     | 031-430114-05V  | DTR DTA114ES(10-10) T05        |
| TR 322(for AC-620/623R/625K)                         | 031-440114-60V  | DTR DTC114TS(10) T05           |
| TR 531(for AC-625K)                                  | 031-430114-19V  | DTR DTA114TS(10) T05           |
| TR 532/533/535/536/539-541<br>(for AC-625K)          | 031-440144-60   | DTR DTC144TS(47) T05           |
| TR 534/537/538(for AC-625K)                          | 031-440114-60V  | DTR DTC114TS(10) T05           |
| TR 551/552(for AC-425K/625K)                         | 031-440114-60V  | DTR DTC114TS(10) T05           |

TR 601-604(AC-620/623R/625K)  
W 014(AC-420/423R/425K)  
W 801(for AC-425K/625K)  
W 913(for AC-620/623R/625K)  
X 501(only for AC-620/623R/625K)  
X 551(for AC-425K/625K)

031-430114-19V  
063-552301-04  
063-502401-11  
063-553201-07  
007-002000-40  
007-200400-03

DTR DTA114TS(10) T05  
WA SAN-PH #24 C230 4P  
WA SDN L200 6P  
WA SDN-VH #22 L320 7P  
OSC CE CSA2.00MG 2.000MHZ  
OSC CE DCRK400 400.000KHZ

#### 4. TC-DK P.C. BOARD

##### REF. NO.

D 1300-1304  
D 1400/1401/1721  
D 1501  
FL1611/1621/1661/1671  
IC1001  
IC1002/1210  
IC1003(for AC-620/623R/625K)  
IC1100  
IC1200  
IC1300  
IC1400  
IC1601  
IC1701/1702  
J 1001(for AC-420/423R/425K)  
J 1001A(for AC-620/623R/625K)  
J 1002  
J 1100  
L 1501(S1/U5/U8/Y6/Y7/A3)  
L 1721  
P 1004  
P 1005  
P 1200  
P 1400  
P 1401  
P 1402  
T 1731  
TM1501  
TR1100/1400/1102/1743  
TR1300/1301  
TR1302/1601/1621/1651/1671/  
TR1741/1721/1742/1751/1752/1756  
TR1401/1501/1611/1612/1661-1662/1701  
TR1502(for AC-423R/623R)  
TR1613/1663  
TR1010/1060/1631/1685/1642/1101/  
TR1035/1681/1692  
TR1641/1643/1691/1693  
(for AC-620/623R/625K)  
TR1723-1725  
TR1726(E1/E2/B1/RE1/E3)  
TR1731-1732(E1/B1/RE1/E3)  
TU1501(E1/E2/B1/RE1/E3)  
TU1501A(S1/U5/U8/Y6)  
TU1501B(Y7)  
VR1200  
W 1006  
W 1400/1401  
X 1200  
W900  
W1500

##### PARTS No.

030-314002-10H  
030-320131-01H  
030-410051-10H  
007-100100-09  
033-314052-21  
033-904558-30A  
033-314053-21  
033-601782-64Q  
033-K02508-64  
033-209258-61  
033-206247-18  
034-101897-64  
034-304094-18  
061-782441-00  
061-782441-00  
060-423123-99  
060-416109-99  
005-229056-01H  
005-101056-00H  
060-108205-27  
060-103205-27  
036-400032-01  
060-105204-27  
060-107204-29  
060-106206-27  
002-800002-09  
061-480312-00  
031-211048-25V  
031-221425-00V  
031-440114-05V  
  
031-232458-25V  
031-250304-06V  
031-241012-06V  
031-440114-60V  
  
031-440114-60V  
  
031-231815-26V  
031-211048-25V  
031-232458-25V  
103-146601-04  
103-146401-04  
103-146101-04  
112-103311-05  
063-B01001-12  
077-322087-09  
037-169344-30J  
077-955168-16  
072-122008-50

##### DESCRIPTION

D SILICON 1N4002-F T52 100/1A  
D SILICON H 1SS131T T52  
D ZENER MTZJ5.1A T52  
COIL TUN 1 100Z-121 100.00KHZ  
IC MC14052BCP  
IC NJM4558L  
IC MC14053BCP  
IC CXA1782BQ  
IC CXD2508AQ  
IC KA9258D  
IC BA6247  
IC CXA1897Q  
IC BU4094BCF  
PIN J HSP-244V1-05 2P  
PIN J HSP-244V1-05 2P  
SOCKET 00 6216 023 000 23P  
SOCKET 00 6232 016 006 16P  
COIL FIX 1 LAP02TA T26 2R2J  
COIL FIX 1 LAP02TA T26 101J  
PLUG B8B-PH-K WHT 8P  
PLUG B3B-PH-K WHT 3P  
SOCKET OPTICAL GPIF32T  
PLUG S5B-PH-K WHT 5P  
PLUG S7B-PH-K WHT 7P  
PLUG S6B-PH-K WHT 6P  
COIL OSC 1 C1047  
TERMINAL LEVER HSP-312V-02  
TR 2SA1048 Y,GR T05  
TR 2SB1425 S,E T05  
DTR DTC114ES(10-10) T05  
  
TR 2SC2458 Y,GR T05  
TR FET 2SK304 E,F T05  
TR 2SD1012-V-SPA-AC F,G,H T05  
DTR DTC114TS(10) T05  
  
DTR DTC114TS(10) T05  
  
TR 2SC1815 Y,GR T05  
TR 2SA1048 Y,GR T05  
TR 2SC2458 Y,GR T05  
TUNER TFCB3E720A FM/MW/LW  
TUNER TFCB1U717A FM/AM  
TUNER TFCB1S713A FM/MW/SW  
R S-FIX V T05EVNDCAA3 0.10W103  
WA PH L100 12P  
WF 2468#26 P2.0 C09 L80 9P  
OSC XTALHO-49/U16934.400KHZ  
CORD FFC P1.0 L150 16P  
WD 1007#22 CO 180

**5. P.C. BOARD BLOCK****REF. NO.**

1-a(AC-420/423R)  
 1-b(AC-425K)  
 1-c(AC-420/423R)  
 1-d(AC-425K)  
 1-e(AC-420/423R/425K)  
 2-a(AC-420 B1/E1/E3)  
 2-b((AC-420/425K)  
 2-c(AC-423R)  
 2-d(AC-425K Y7)  
 2-e((AC-420/423R)  
 2-f(AC-420/425K)  
 2-g(AC-420/423R/425K)  
 3-a(AC-420/423R/425K)  
 3-b(AC-420 B1/E1/E3)  
 3-c(AC-420 S1)  
 3-d(AC-423R)  
 3-e(AC-425K U5/U8/Y6)  
 3-f(AC-420/425R/425K)  
 3-g(AC-420/423R/425K)  
 3-h(AC-420/423R)  
 3-i(AC-425K)  
 4a(AC-420)  
 4b(AC-620)  
 5-a(AC-620/623R)  
 5-b(AC-625K)  
 5-c(AC-620/623R)  
 5-d(AC-625K)  
 5-e(AC-620/623R/625K)  
 6-a(AC-620 B1/E1/E3)  
 6-b((AC-620 S1 AC-625K U5/U8/Y6/Y7)  
 6-c(AC-623R)  
 6-d(AC-625K Y7)  
 6-e(AC-620/623R)  
 6-f (AC-620/623R)  
 6-g (AC-620/623R/625K)  
 7-a(AC-620/623R/625K)  
 7-b(AC-620 B1/E1/E3)  
 7-c(AC-620 S1)  
 7-d(AC-623R)  
 7-e(AC-625K U5/U8/Y6)  
 7-f(AC-625K Y7)  
 7-g(AC-620/623R/625K)  
 7-h(AC-620/623R/625K)  
 7-i(AC-620/623R)  
 7-j(AC-625K)

**PARTS No.**

771-AC42001-01  
 771-AC42001-46  
 771-AC42001-02  
 771-AC42001-47  
 771-AC42001-03  
 771-AC42001-04  
 771-AC42001-27  
 771-AC42001-38  
 771-AC42001-82  
 771-AC42001-05  
 771-AC42001-28  
 771-AC42001-06  
 771-AC42001-07  
 771-AC42001-08  
 771-AC42001-31  
 771-AC42001-42  
 771-AC42001-53  
 771-AC42001-09  
 771-AC42001-10  
 771-AC42001-11  
 771-AC42001-56  
 790-010301-01  
 790-010302-01  
 771-AC62001-01  
 771-AC62001-46  
 771-AC62001-02  
 771-AC62001-47  
 771-AC62001-03  
 771-AC62001-04  
 771-AC62001-27  
 771-AC62001-38  
 771-AC62001-82  
 771-AC62001-05  
 771-AC62001-28  
 771-AC62001-06  
 771-AC62001-07  
 771-AC62001-08  
 771-AC62001-31  
 771-AC62001-42  
 771-AC62001-53  
 771-AC62001-86  
 771-AC62001-09  
 771-AC62001-10  
 771-AC62001-11  
 771-AC62001-56

**DESCRIPTION**

MAIN P.C. BOARD  
 MAIN P.C. BOARD  
 PRI. P.C. BOARD  
 PRI. P.C. BOARD  
 SEC. P.C. BOARD  
 TC-TU/CD/DK P.C. BOARD  
 TC-TU/CD/DK P.C. BOARD  
 TC-TU/CD/DK P.C. BOARD  
 TC-TU/CD/DK P.C. BOARD  
 TC-OSC P.C. BOARD  
 TC-OSC P.C. BOARD  
 TC-RELAY P.C. BOARD  
 SYS-SYS FLD P.C. BOARD  
 SYS-MECH CON P.C. BOARD  
 SYS-MECH CON P.C. BOARD  
 SYS-MECH CON P.C. BOARD  
 SYS-MECH CON P.C. BOARD  
 SYS-MECH CON P.C. BOARD  
 SYS-MECH CON P.C. BOARD  
 SYS-MIC JACK P.C. BOARD  
 SYS-MIC JACK P.C. BOARD  
 REMOTE P.C. BOARD  
 REMOTE P.C. BOARD  
 MAIN P.C. BOARD  
 MAIN P.C. BOARD  
 PRI. P.C. BOARD  
 PRI. P.C. BOARD  
 PRI. P.C. BOARD  
 TC-TU/CD/DK P.C. BOARD  
 TC-TU/CD/DK P.C. BOARD  
 TC-TU/CD/DK P.C. BOARD  
 TC-TU/CD/DK P.C. BOARD  
 TC-OSC P.C. BOARD  
 TC-OSC P.C. BOARD  
 TC-RELAY P.C. BOARD  
 SYS-SYS LED P.C. BOARD  
 SYS-MECH CON P.C. BOARD  
 SYS-MECH CON P.C. BOARD  
 SYS-MECH CON P.C. BOARD  
 SYS-MECH CON P.C. BOARD  
 SYS-MECH CON P.C. BOARD  
 SYS-DECK LED P.C. BOARD  
 SYS-CDOPE P.C. BOARD  
 SYS-MIC JACK P.C. BOARD  
 SYS-MIC JACK P.C. BOARD

**6. YMC03 P.C. BOARD****REF. NO.**

D4410  
 TR4410  
 J4410  
 J4411  
 W4401  
 W4412

**PARTS NO.**

030-600048-00  
 031-594800-00  
 060-405124-99  
 060-405123-99  
 077-622077-02  
 063-555301-05

**DESCRIPTION**

D LED GL4800  
 TR PHOTO PT4800  
 SOCKET 0062160051005 5P  
 SOCKET 0062160051005 5P  
 WF2468# P I O C09L072P  
 WA SAN-PHL 530 5P

**7. ACCESSARY REF. NO.**

1  
 2

**PARTS. No.**

790-010301-01  
 790-010302-01

**DESCRIPTION**

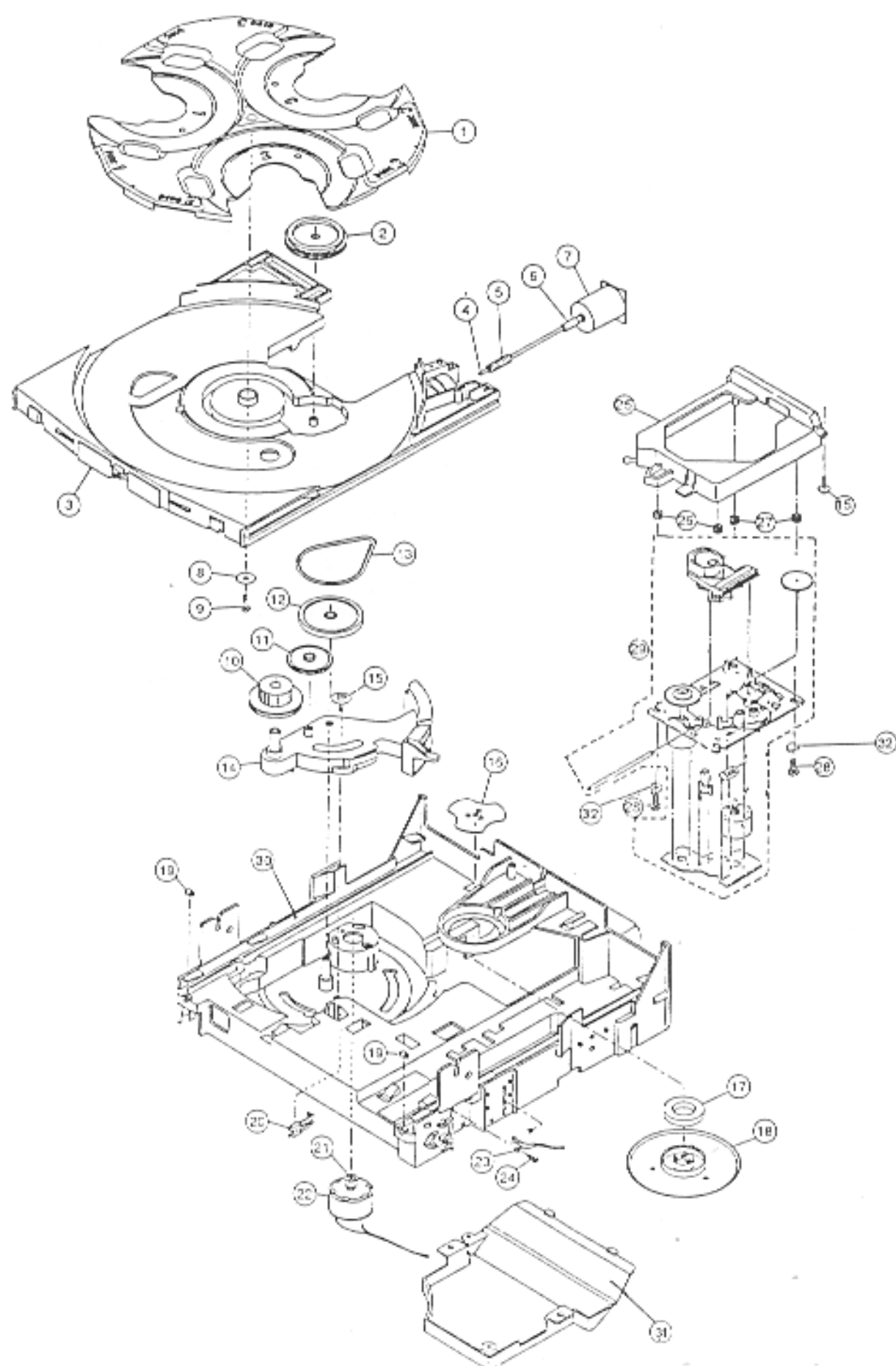
REMOCON RC-S520  
 REMOCON RC-S720

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**8. CD MECHANISM**

| REF. NO. | PARTS NO.      | DESCRIPTION                  |
|----------|----------------|------------------------------|
| 1        | 229-385602-01S | HOLDER DISC                  |
| 2        | 288-385601-01Z | GEAR WORM WHEEL TABLE        |
| 3        | 220-385602-01S | TRAY LOADING                 |
| 4        | 438-385601-01  | SHAFT                        |
| 5        | 288-385604-01Z | WORM                         |
| 6        | 239-385601-01Z | JOINT                        |
| 7        | 743-037012-54  | MOTOR PF-370CA-15370 12V     |
| 8        | 634-150030-08  | PW30X150X080 THK             |
| 9        | 619-300208-00  | TAPING SCREW 3X1 25X8mm      |
| 10       | 288-385605-01Z | GEAR LOADING (A)             |
| 11       | 288-385606-01Z | GEAR LOADING (B)             |
| 12       | 288-385602-01Z | PULLEY GEAR                  |
| 13       | 334-385604-01  | BELT LOADING                 |
| 14       | 288-385603-01S | HOLDER GEAR                  |
| 15       | 615-300308-00  | BW/T 3X8mm                   |
| 16       | 428-385603-01  | PLATE CLAMPER                |
| 17       | 489-383801-01  | MAGNET DISC CLAMP            |
| 18       | 229-385606-01S | CLAMPER                      |
| 19       | 259-385602-01Z | ROLLER                       |
| 20       | 047-102127-00  | LEAF SWITCH LSA-2127E        |
| 21       | 243-385601-01Z | PULLEY                       |
| 22       | 743-050009-54  | MOTOR RF-500TB-14415 D/V     |
| 23       | 047-101119-01  | LEAF SWITCH ISA-1119H        |
| 24       | 610-260208-10  | R/T 2.6X8mm                  |
| 25       | 220-385601-01S | HOLDER TRAVERSE              |
| 26       | 334-385606-01  | INSULATOR                    |
| 27       | 334-385606-01  | INSULATOR                    |
| 28       | 610-200216-00  | SELF-SCREW TAPING B/T 2.0X16 |
| 29       | 747-021301-02  | MECHA TRAVERSE KSM213CCM     |
| 30       | 220-385603-01R | CHASSIS MAIN                 |
| 31       | 219-385601-01Z | CD MECH COVER                |
| 32       | 634-100027-05  | METAL WASHER 10X2.7X0.5      |

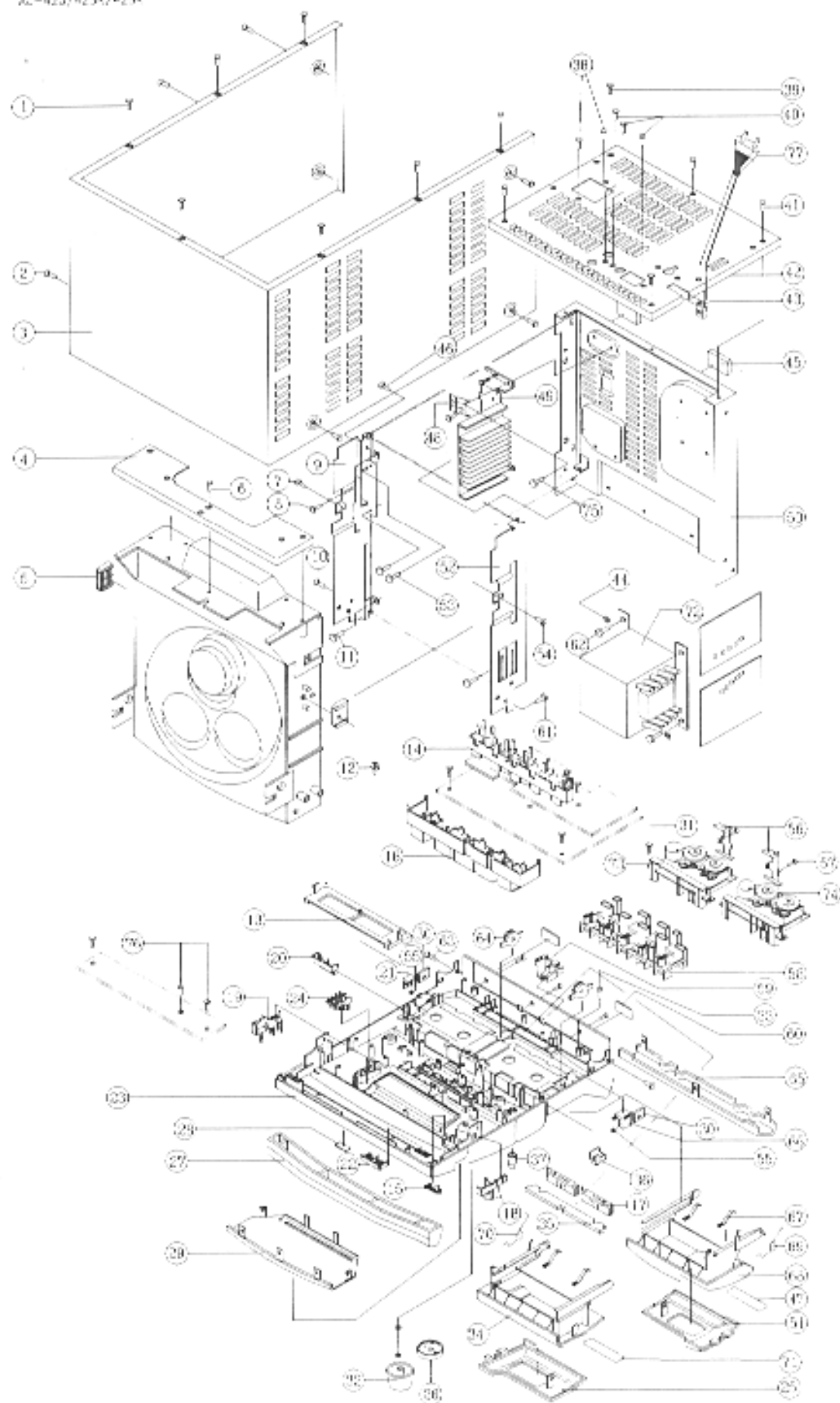
# CD MECHANISM BLOCK



# 9. AC-420/423R/425K

| REF. NO.              | PARTS NO.      | DESCRIPTION                                                                              |
|-----------------------|----------------|------------------------------------------------------------------------------------------|
| 1                     | 606A301208-00  | TAPING SCREW P TYPE BID H 3X1.25PX8MM                                                    |
| 2                     | 606A301208-00  | TAPING SCREW P TYPE BID H 3X1.25PX8MM                                                    |
| 3                     | 402-385002-02  | MAIN COVER SILVER                                                                        |
| 4                     | 495-385017-01  | REAR CABINET SUB                                                                         |
| 5                     | 284-385001-01R | MECH SPACER BLACK HI-PS                                                                  |
| 6                     | 619-300208-00  | TAPING SCREW P TYPE BID H 3X8MM BLACK                                                    |
| 7                     | 619-300208-00  | TAPING SCREW P TYPE BID H 3X8MM BLACK                                                    |
| 8                     | 619-300208-00  | TAPING SCREW P TYPE BID H 3X8MM BLACK                                                    |
| 9                     | 428-385001-01  | CD BRACKET 'L'                                                                           |
| 10                    | 619-300208-00  | TAPING SCREW P TYPE BID H 3X8MM BLACK                                                    |
| 11                    | 619-300208-00  | TAPING SCREW P TYPE BID H 3X8MM BLACK                                                    |
| 12                    | 292-AA0302-01S | DOBLEY BUTTON                                                                            |
| 13                    | 229-AA0301-01S | FLD BRACKET HI-PS                                                                        |
| 14                    | 291-AA0302-01S | FUNCTION BUTTON ABS                                                                      |
| 15                    | 291-AA0303-01Z | BALANCE BUTTON GRAY                                                                      |
| 16                    | 291-AA0306-01Z | OP BUTTON (AC-420)                                                                       |
| 17                    | 250-AA0301-01S | LAMP HOLDER WHITE ABS                                                                    |
| 18                    | 292-AA0301-01S | REC BUTTON RED (P-96014) ABS                                                             |
| 19                    | 291-AA0501-01S | CH BUTTON DARK GREY (P-92008) ABS                                                        |
| 20                    | 291-AA0305-01S | POWER BUTTON DARK GREY (P-92008) W/MET GREY(T-96008HB) SP. SILK'S RED(S-88011) LETT. ABS |
| 21                    | 229-AA0314-01Z | LATCH BRACKET (L) POM                                                                    |
| 22                    | 291-AA0301-01S | DISC BUTTON DARK GREY (P-92008)                                                          |
| 23-a(AC-420)          | 200-AA0311-01R | FRONT CABINET HI-PS                                                                      |
| 23-b(AC-423R)         | 200-AA0311-02R | FRONT CABINET HI-PS                                                                      |
| 23-c(AC-425K)         | 200-AA0312-01R | FRONT CABINET HI-PS                                                                      |
| 24                    | 275-AA0301-01S | TIMER BUTTON DARK GREY (P-92008) ABS                                                     |
| 25                    | 261-AA0301-01K | CASS DOOR LENS ( L ) SMOKE                                                               |
| 26                    | 273-AA0302-01S | VOLUME RING DARK GREY (P-92008) W/PLATTING ABS                                           |
| 27                    | 219-AA0311-01R | CD DOOR HI-PS                                                                            |
| 28                    | 286-385001-02S | NAME PLATE 'AKAI'                                                                        |
| 29                    | 263-AA0301-02K | DISPLAY LENS AS                                                                          |
| 30                    | 229-385016-01Z | LATCH BRACKET BLACK POM                                                                  |
| 31                    | 619-300210-00  | TAPPING SCREW P TYPE BID H 3X10MM BLACK                                                  |
| 32                    | 273-AA0301-01S | VOLUME KNOB ABS                                                                          |
| 33                    | 619-300210-00  | TAPING SCREW P TYPE BID H 3X10MM BLACK                                                   |
| 34                    | 211-AA0301-01S | CASS DOOR ( L ) HI-PS                                                                    |
| 35                    | 418-AA0301-01  | OVERLAY CLEAR SILK'S WHITE(S-96001) COLOR PVC                                            |
| 36                    | 291-AA0304-01S | BASS BUTTON MILKY WHITE (CL-301) ABS                                                     |
| 37                    | 273-AA0303-01S | DARK GRAY ABS                                                                            |
| 38                    | 606A301208-00  | TAPING SCREW P TYPE BID H 3X1.25PX8MM                                                    |
| 39                    | 606A301208-00  | TAPING SCREW P TYPE BID H 3X1.25PX8MM                                                    |
| 40                    | 614-300208-00  | SELF-TAPPING SCREW B/T 3X8MM BLACK                                                       |
| 41                    | 606A301208-00  | TAPING SCREW P TYPE BID H 3X1.25PX8MM                                                    |
| 42-a(AC-420 E/B)      | 495-AA0301-01  | PANEL REAR                                                                               |
| 42-b(AC-420 S)        | 495-AA0301-02  | PANEL REAR                                                                               |
| 42-c(for AC-423R(E) ) | 495-AA0301-03  | PANEL REAR                                                                               |
| 42-d(AC-425K U5,Y6)   | 495-AA0302-01  | PANEL REAR                                                                               |
| 42-e(AC-425K U8,Y7)   | 495-AA0302-01  | PANEL REAR                                                                               |
| 43                    | 650-381301-01  | CORD BUSHING                                                                             |
| 44                    | 663-076040-10S | SPRING WASHER 7.6X4X1MM THK SIL CMT                                                      |
| 45                    | 207-385101-01Z | REAR FOOT (PLASTIC) BLACK EVA                                                            |
| 46                    | 619-300208-00  | TAPING SCREW P TYPE BID H 3X8MM BLACK                                                    |

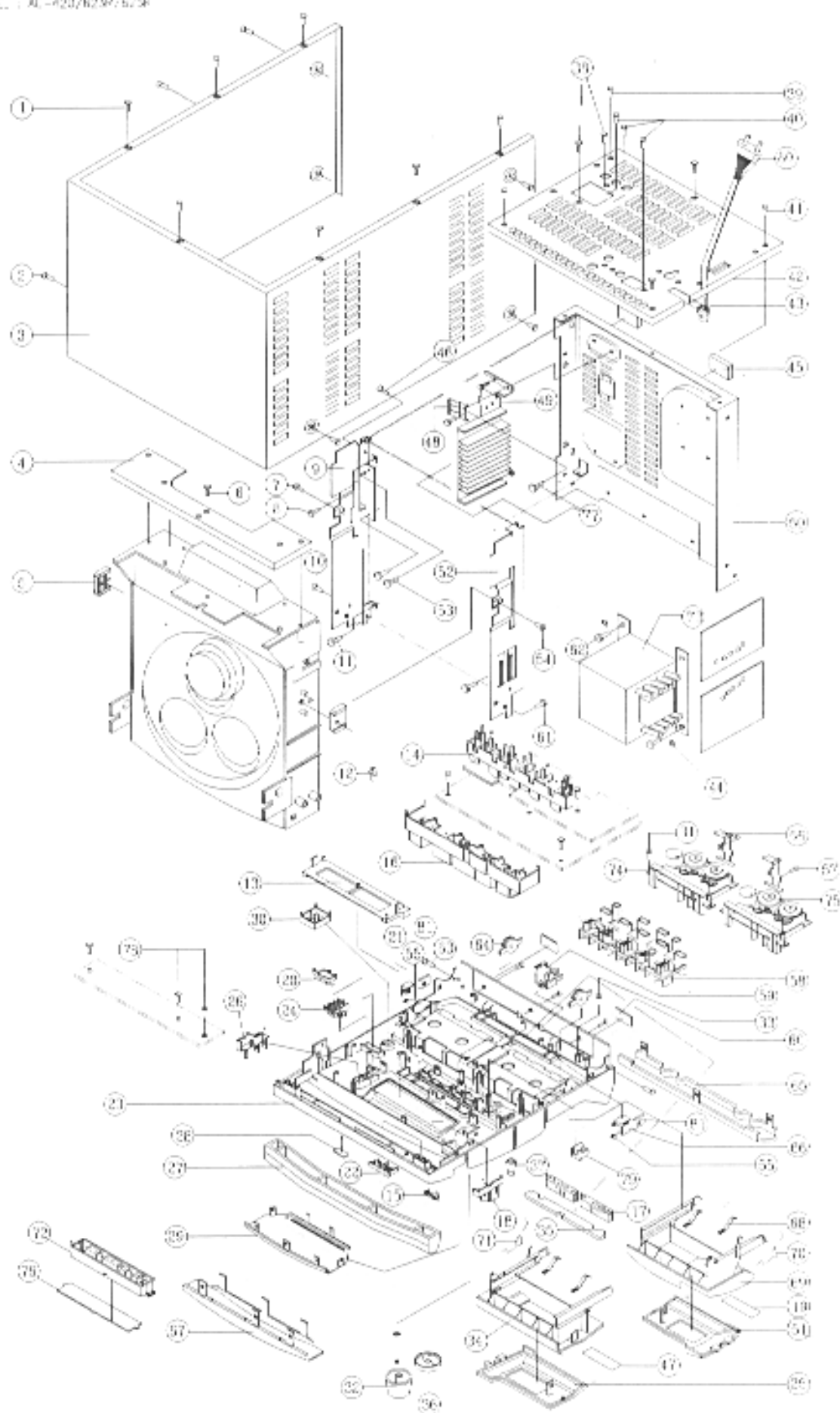
|                       |                |                                           |
|-----------------------|----------------|-------------------------------------------|
| 47                    | 211-AA0502-02S | CASS DOOR PALTE (R)-B BLACK               |
| 48                    | 428-385101-01  | HOLDER BRACKET ( H )                      |
| 49                    | 481-385102-01  | HEAT SINK ( H-2 )                         |
| 50                    | 493-385112-01  | METAL BOTTOM CABINET (H) 1MM              |
| 51                    | 261-AA0302-01K | CASS DOOR LENS ( R ) SMOKE                |
| 52                    | 428-385002-01  | CD BRACKET 'R'                            |
| 53                    | 619-300208-00  | TAPING SCREW P TYPE BID H 3X8MM BLACK     |
| 54                    | 619-300208-00  | TAPING SCREW P TYPE BID H 3X8MM BLACK     |
| 55                    | 477-385011-01  | LATCH PUSH SPRING                         |
| 56                    | 483-AA0301-01  | SHIELD HEAD                               |
| 57                    | 604-264501-00A | TAPPING SCREW C TYPE BID 2.6X5MM          |
| 58                    | 299-AA0312-01S | LID BRACKET TX-3 WHITE ABS                |
| 59                    | 229-AA0303-01S | LID BRACKET BLACK ABS                     |
| 60                    | 330-385001-01  | FRONT CUSHION FOOT                        |
| 61                    | 619-300208-00  | TAPING SCREW P TYPE BID H 3X8MM BLACK     |
| 62                    | 602-407008-60A | TAPPING SCREW P TYPE WASHER H 4X8MM       |
| 63                    | 619-300212-00  | TAPPING SCREW P TYPE BID H 3X12MM         |
| 64                    | 703-385002-01  | DAMPER DA-60WW ( 105 ) ASSEMBLY           |
| 65                    | 263-AA0303-01K | DECK DIR LENS AS                          |
| 66                    | 229-AA0315-01Z | LATCH BRACKET (R) POM                     |
| 67                    | 470-AA0321-01  | CASS DOOR SPRING SHEET                    |
| 68                    | 211-AA0302-01S | CASS DOOR ( R ) HI-PS                     |
| 69                    | 471-AA0302-01  | CASS DOOR SPRING WIRE ( R )               |
| 70                    | 471-AA0301-01  | CASS DOOR SPRING WIRE ( L )               |
| 71                    | 211-AA0501-02S | CASS DOOR PALTE (L)-B BLACK               |
| 72-a(AC-420/423R)     | 001-86AA03-22  | POWER TRANSFORMER C1058-E                 |
| 72-b(AC-425K)         | 001-86AA03-B2  | POWER TRANSFORMER C1058-U                 |
| 73                    | 741-495300-09  | LOGICAL CONTROL DECK MECHA GT-E5300 (P/B) |
| 74                    | 741-495600-09  | LOGICAL CONTROL DECK MECHA GT-E5600(R/P)  |
| 75                    | 606A301208-00  | TAPING SCREW P TYPE BID H 3X1 25PX8MM     |
| 76                    | 619-300210-00  | TAPINET SCREW P TYPE BID H 3X10MM BLACK   |
| 77-a(except,B1,Y6,S1) | 071-669078-00A | AC LINE CORD VDE                          |
| 77-b(B1,Y6)           | 071-449078-20  | AC LINE CORD BS                           |
| 77-c(S1)              | 071-559078-10  | AC LINE CORD SAA                          |



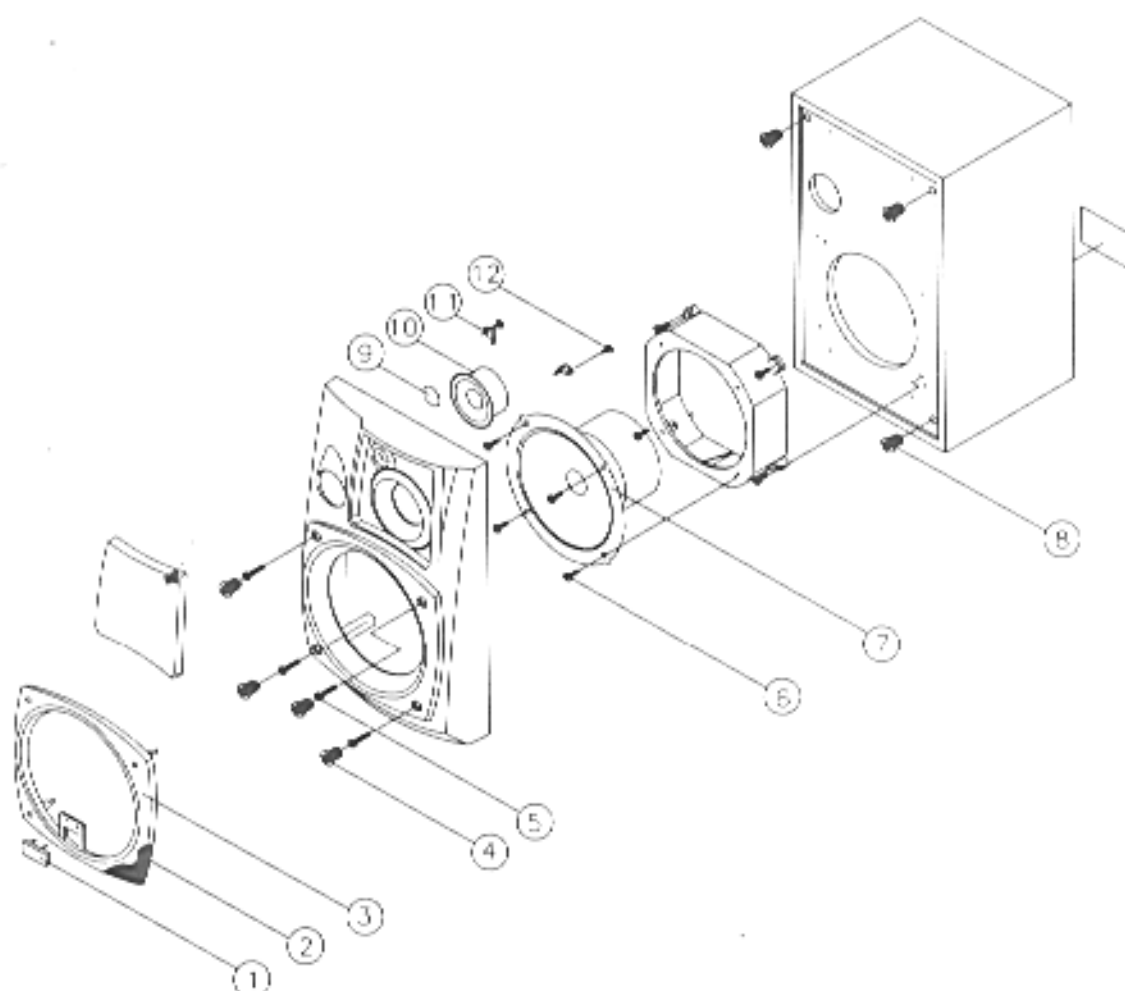
# 10. AC-620/623R/625K

| REF. NO.           | PARTS NO.      | DESCRIPTION                                                                              |
|--------------------|----------------|------------------------------------------------------------------------------------------|
| 1                  | 606A301208-00  | TAPPING SCREW P TYPE BID H 3X1.25PX8MM                                                   |
| 2                  | 606A301208-00  | TAPPING SCREW P TYPE BID H 3X1.25PX8MM                                                   |
| 3                  | 402-385002-02  | MAIN COVER SILVER                                                                        |
| 4                  | 495-385027-01  | REAR CABINET SUB                                                                         |
| 5                  | 248-385001-01R | MECH SPACER BLACK HI-PS                                                                  |
| 6                  | 619-300208-00  | TAPPING SCREW P TYPE BID H 3X8MM BLACK                                                   |
| 7                  | 619-300208-00  | TAPPING SCREW P TYPE BID H 3X8MM BLACK                                                   |
| 8                  | 619-300208-00  | TAPPING SCREW P TYPE BID H 3X8MM BLACK                                                   |
| 9                  | 428-385001-01  | CD BRACKET 'L'                                                                           |
| 10                 | 619-300208-00  | TAPPING SCREW P TYPE BID H 3X8MM BLACK                                                   |
| 11                 | 619-300208-00  | TAPPING SCREW P TYPE BID H 3X8MM BLACK                                                   |
| 12                 | 292-AA0302-01S | DOBLY BUTTON                                                                             |
| 13                 | 229-AA0301-01S | FLD BRACKET HI-PS                                                                        |
| 14                 | 291-AA0302-01S | FUNCTION BUTTON ABS                                                                      |
| 15                 | 291-AA0303-01S | BALANCE BUTTON GRAY                                                                      |
| 16                 | 291-AA0306-02Z | OP BUTTON (AC-620)                                                                       |
| 17                 | 250-AA0301-01S | LAMP HOLDER WHITE ABS                                                                    |
| 18                 | 292-AA0301-01S | REC BUTTON RED (P-96014) ABS                                                             |
| 19                 | 211-AA0502-01S | CASS DOOR PLATE (R)-B BLACK                                                              |
| 20                 | 291-AA0305-01S | POWER BUTTON DARK GREY (P-92008) W/MET GREY(T-96008HB) SP. SILK'S RED(S-88011) LETT. ABS |
| 21                 | 229-AA0314-01Z | LATCH BRACKET(L) POM                                                                     |
| 22                 | 291-AA0301-01S | DISC BUTTON DARK GREY                                                                    |
| 23-a(AC-620)       | 200-AA0513-01R | FRONT CABINET HI-PS                                                                      |
| 23-b(AC-623R)      | 200-AA0513-02R | FRONT CABINET HI-PS                                                                      |
| 23-c(AC-625K)      | 200-AA0514-01R | FRONT CABINET HI-PS                                                                      |
| 24                 | 275-AA0301-01S | TIMER BUTTON DARK GREY (P-92008) ABS                                                     |
| 25                 | 261-AA0301-01K | CASS DOOR LENS ( L ) SMOKE                                                               |
| 26                 | 291-AA0501-01S | CH BUTTON DARK GREY (P-92008) ABS                                                        |
| 27                 | 219-AA0311-01R | CD DOOR HI-PS                                                                            |
| 28                 | 286-385001-02S | NAME PLATE 'AKAI'                                                                        |
| 29                 | 263-AA0301-02K | DISPLAY LENS AS                                                                          |
| 30                 | 292-AA0501-01S | ON/OFF BUTTON DARK GREY                                                                  |
| 31                 | 619-300210-00  | TAPPING SCREW P TYPE BID H 3X10MM BLACK                                                  |
| 32                 | 273-AA0301-01S | VOLUME KNOB ABS                                                                          |
| 33                 | 619-300210-00  | TAPING SCREW P TYPE BID H 3X10MM BLACK                                                   |
| 34                 | 211-AA0301-01S | CASS DOOR ( L ) HI-PS                                                                    |
| 35                 | 418-AA0301-01  | OVERLAY CLEAR SILK'S WHITE(S-96001) COLOR PVC                                            |
| 36                 | 273-AA0302-01S | VOLUME RING DARK GREY (P-92008) W/PLATTING ABS                                           |
| 37                 | 273-AA0303-01S | MIC KNOB DARK GREY ABS                                                                   |
| 38                 | 606A301208-00  | TAPINET SCREW TYPE BID H 3X1.25PX8MM                                                     |
| 39                 | 606A301208-00  | TAPINET SCREW P TYPE BID H 3X1.25PX8MM                                                   |
| 40                 | 614-300208-00  | SELF-TAPPING SCREW B/T 3X8MM BLACK                                                       |
| 41                 | 606A301208-00  | TAPINET SCREW P TYPE BID H 3X1.25PX3MM                                                   |
| 42-a(AC-620 E/B)   | 495-AA0305-01  | PANEL REAR                                                                               |
| 42-b(AC-620 S)     | 495-AA0305-02  | PANEL REAR                                                                               |
| 42-c(AC-623R(E) )  | 495-AA0305-03  | PANEL REAR                                                                               |
| 42-d(AC-620 U5,Y6) | 495-AA0306-01  | PANEL REAR                                                                               |
| 42-e(AC-620 U8,Y7) | 495-AA0306-02  | PANEL REAR                                                                               |
| 43                 | 650-381301-01  | CORD BUSHING                                                                             |
| 44                 | 663-076040-10S | SPRING WASHER 7.6X4X1MM THK SIL CMT                                                      |
| 45                 | 330-385002-01  | REAR CUSHION FOOT                                                                        |
| 46                 | 619-300208-00  | TAPPING SCREW P TYPE BID H 3X8MM BLACK                                                   |

|                       |                |                                            |
|-----------------------|----------------|--------------------------------------------|
| 47                    | 211-AA0501-01S | CASS DOOR PLATE (L)-B BLACK                |
| 48                    | 428-AA0501-01  | HOLDER BKT TR-4                            |
| 49                    | 481-AA0501-01  | HEAT SINK 620                              |
| 50                    | 493-385021-01  | METAL BOTTOM CAB 0.8MM                     |
| 51                    | 261-AA0302-01K | CASS DOOR LENS ( R ) SMOKE                 |
| 52                    | 428-385002-01  | CD BRACKET 'R'                             |
| 53                    | 619-300208-00  | TAPPING SCREW P TYPE BID H 3X8MM BLACK     |
| 54                    | 619-300208-00  | TAPPING SCREW P TYPE BID H 3X8MM BLACK     |
| 55                    | 477-385011-01  | LATCH PUSH SPRING                          |
| 56                    | 483-AA0301-01  | SHIELD HEAD                                |
| 57                    | 604-264501-00A | TAPPING SCREW C TYPE BID H 2.6X5MM         |
| 58                    | 299-AA0312-01S | LID BRACKET WHITE TX-3 ABS                 |
| 59                    | 229-AA0303-01S | LID BRACKET BLACK ABS                      |
| 60                    | 330-385001-01  | FRONT CUSHION FOOT                         |
| 61                    | 619-300208-00  | TAPPING SCREW P TYPE BID H 3X8MM BLACK     |
| 62                    | 602-407008-60A | TAPPING SCREW P TYPE WASHER H 4X8MM        |
| 63                    | 619-300212-00  | TAPING SCREW P TYPE BID H 3X12MM BLACK     |
| 64                    | 703-385002-01  | DAMPER DA-60WW ( 105 ) ASSEMBLY            |
| 65                    | 263-AA0303-01K | DECK DIR LENS AS                           |
| 66                    | 229-AA0315-01Z | LATCH BRACKET(R) POM                       |
| 67                    | 263-AA0501-02K | PROG DISPLAY LENS GREY SMOKE (P-96011)AS   |
| 68                    | 470-AA0321-01  | CASS DOOR SPRING SHEET                     |
| 69                    | 211-AA0302-01S | CASS DOOR ( R ) HI-PS                      |
| 70                    | 471-AA0302-01  | CASS DOOR SPRING WIRE ( R )                |
| 71                    | 471-AA0301-01  | CASS DOOR SPRING WIRE ( L )                |
| 72                    | 229-AA0501-01S | PRO LED BRACKET WHITE ABS                  |
| 73-a(AC-620/623R)     | 001-873855-42  | POWER TRANSF ORMER C1050-E                 |
| 73-b(AC-625K)         | 001-873855-02  | POWER TRANSFORMER C1050-U                  |
| 74                    | 741-495300-09  | LOGICAL CONTROL DECK MECHA GT-E5300 (P/B)  |
| 75                    | 741-495600-09  | LOGICAL CONTROL DECK MECHA GT-E5600 (R/P)  |
| 76                    | 418-AA0501-01S | OVERLAY CLEAR SILK'S MILKY WHITE COLOR PVC |
| 77                    | 606A301208-00  | TAPING SCREW P TYPE BID H 3X1.25PX8MM      |
| 78                    | 619-300210-00  | TAPPING SCREW P TYPE BID H 3X10MM BLACK    |
| 79                    | 291-AA0304-01S | BASS BUTTON MILKY WHITE (CL-301) ABS       |
| 80-a(except,B1,Y6,S1) | 071-669078-00A | AC LINE CORD VDE                           |
| 80-b(B1,Y6)           | 071-449078-20  | AC LINE CORD BS                            |
| 80-c(S1)              | 071-559078-10  | AC LINE CORD SAA                           |
| 81                    | 229-385016-01Z | LATCH BRACKET BLACK POM                    |



# 11. SPEAKER SYSTEM (SR-425)



| REF. NO | PART NO        | DESCRIPTION                           |
|---------|----------------|---------------------------------------|
| 1       | 286-385002-01S | NAME PLATE FOR AKAI                   |
| 2       | 583-051501-01  | SPEAKER CLOTH                         |
| 3       | 239-051501-01R | FRAME NET (R)                         |
| 4       | 259-050201-01Z | CUSHION FOR SPEAKER BOX BLK S B R     |
| 5       | 610-350220-10  | SELF-TAPPING SCREW R/T 3.5X20MM       |
| 6       | 614-400216-30  | SELF-TAPPING SCREW R/T 4.0X16MM BLACK |
| 7       | 066-953254-WT  | WOOFER SPEAKER                        |
| 8       | 259-381301-01  | CUSHION                               |
| 9       | 070-100027-02Z | 27MM PIEZO                            |
| 10      | 066-283220-WT  | MIDRANGE SPEAKER                      |
| 11      | 462-333202-01  | SPEAKER CLIP                          |
| 12      | 612-300210-10  | SELF-TAPPING SCREW 3X10MM             |

## 12. REMOTE EXPLODED DIAGRAM AND PARTS LIST

### RC-S520

#### REF. NO

\*

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#### PART NO

790-010301-01

411-010301-01

201-010302-01S

334-010311-01

090-010302-03

473-010311-01

472-010311-01

203-010311-01S

610-260206-10

474-010101-01

210-010301-01S

#### DESCRIPTION

REMOTE CONTROL HANDSET RC-S520

REMOTE NAME PLATE

REMOTE CAB TOP

REMOTE CONTACTIVE RUBBER (46 KEYS)

PCB REMOTE BOARD

BATT CONTACT SPRING SHEET-VE

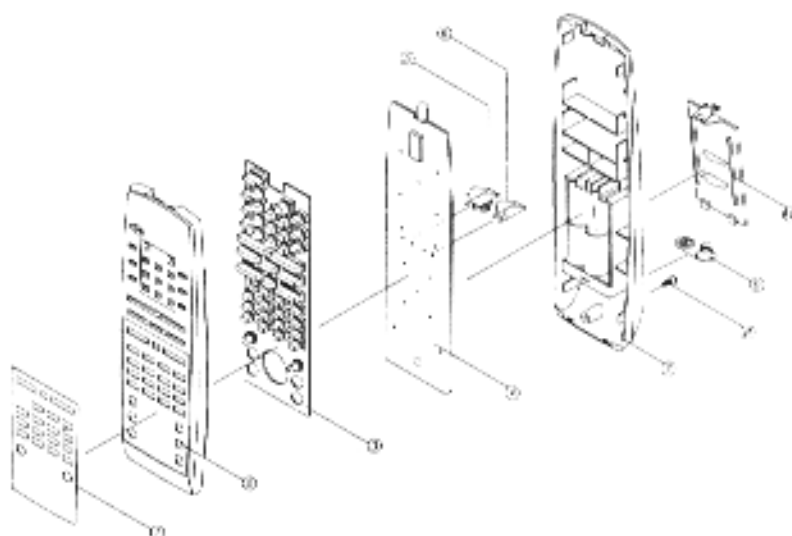
BAT CONTACT PLATE +VE

REMOTE CABINET BOTTOM

SELF-TAPPING SCREW K/T 2.6X6

BAT CONTACT SPRING WIRE +A-VE

REMOTE BATTERY COVER



### RC-S720

#### REF. NO

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#### PART NO

790-010302-01

411-010302-01

201-010301-02S

334-010312-01

090-010302-03

473-010311-01

472-010311-01

203-010311-01S

610-260206-10

474-010101-01

210-010301-01S

#### DESCRIPTION

REMOTE CONTROL HANDSET RC-S720

REMOTE NAME PLATE

REMOTE CAB TOP

REMOTE CONTACTIVE RUBBER (46 KEYS)

PCB REMOTE BOARD

BATT CONTACT SPRING SHEET-VE

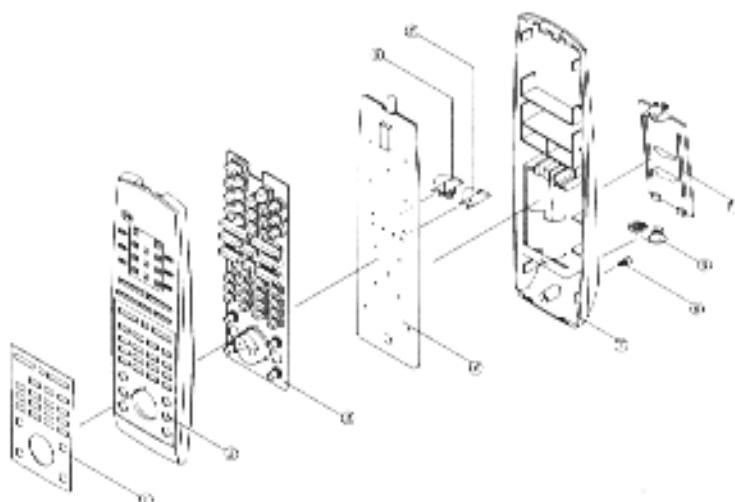
BAT CONTACT PLATE +VE

REMOTE CABINET BOTTOM

SELF-TAPPING SCREW K/T 2.6X6

BAT CONTACT SPRING WIRE +A-VE

REMOTE BATTERY COVER



## XII. ABBREVIATIONS

### TUNER

| ABBREVIATION | EXPLANATION                | ABBREVIATION | EXPLANATION                   |
|--------------|----------------------------|--------------|-------------------------------|
| AFC          | Auto Frequency Control     | MEMO         | MEMOry                        |
| AGC          | Auto Gain Control          | MI-COM       | Micro-COMputer                |
| ALC          | Auto Level Control         | MIN          | MINimum                       |
| AM           | Amplitude Modulation       | MIX          | MIXing                        |
| AMP          | AMPlifier                  | MPX          | MultiPlEx                     |
| ANT          | ANTenna                    | MW           | Medium Wave(frequency)        |
| BATT         | BATTery                    | NC           | No Connection                 |
| BLK          | BLock                      | NFB          | Negative Feed Back            |
| BUFF         | BuFFer                     | OSC          | OSCillator                    |
| COMP         | COMParator                 | PCB          | Printed Circuit Board         |
| DET          | DETECT(DETECTOR)           | PLL          | Phase Locked Loop             |
| FLD          | FLUorescent Display        | Q.D          | Quadrature Detector           |
| FM           | Frequency Modulation       | Rch          | Right channel                 |
| FREQ         | FREQuency                  | REF          | REFerence                     |
| GND          | GrouND                     | REG          | REGulator                     |
| H            | High                       | RF           | Radio Frequency               |
| HPF          | High Pass Filter           | SEG          | SEGment                       |
| IF           | Intermediate Frequency     | SELE         | SELEctor                      |
| IHF          | Institute of High Fidelity | SENS         | SENSitivity                   |
| IND          | INDicator                  | SIG          | SIGNAL                        |
| IO           | In/Out                     | S/N          | Signal to Noise Ratio         |
| JW           | Jumper Wire                | SSG          | Standard Signal Generator     |
| L            | Low                        | STD          | STANdard                      |
| LCD          | Liquid Crystal Display     | SW           | Switch; Short Wave(frequency) |
| LCH          | Left Channel               | THD          | Total Harmonic Distortion     |
| LED          | Light Emitting Diode       | TP           | Test Point                    |
| LPF          | Low Pass Filter            | VCO          | Voltage Controlled Oscillator |
| LW           | Long Wave (Frequency)      | VR           | Variable Resistor             |
| XTAL         | Crystal                    |              |                               |

# COMPACT DISC

| ABBREVIATION | EXPLANATION                              | ABBREVIATION | EXPLANATION                            |
|--------------|------------------------------------------|--------------|----------------------------------------|
| A-D          | Analog to Digital(Converter)             | Mb           | Mega Bits                              |
| ADC          | Analog Code Decimal (Converter)          | MDA          | Motor Drive Amplifier                  |
| BCD          | Binary Code Decimal                      | MFM          | Modified Frequency Modulation          |
| BPI          | Bits Per Inch                            | MV           | Mono-stable Multivibrator              |
| CD           | Compact Disc                             | M2FM         | Modified Modified Frequency Modulation |
| CIRC         | Cross Interleaving & Reed Solomon Coding | MOD2         | Module 2 (Addition)                    |
| CLV          | Constant Linear Velocity                 | MP           | Microprocessor                         |
| CP           | Clock Pulses                             | MSB          | Most Significant Bit                   |
| CRCC         | Cyclic Redundancy Check Codes            | NA           | Numerical Aperture                     |
| D Level      | Decision Level                           | NRZ          | Non Return to Zero                     |
| D-A          | Digital to Analog(Converter)             | NRZ-I        | Non Return to Zero Inverted            |
| DAC          | Digital to Analog(Converter)             | P            | Parity Data                            |
| DAD          | Digital Audio Disc                       | PAM          | Pulse Amplitude Modulation             |
| DEM          | Dynamic Element Matching                 | PCM          | Pulse Code Modulation                  |
| DPD          | Differential Phase Detection             | PD           | Phase Detector                         |
| DSV          | Digital sum Value                        | PE           | Phase Encode                           |
| EFM          | Eight to Fourteen Modulation             | PLL          | Phase locked Loop                      |
| EX-OR        | Exclusive OR                             | PNM          | Pulse Number Modulation                |
| FCI          | Flux Changes per Inch                    | PPM          | Pulse Phase Modulation                 |
| FIR          | Finite Impulse Response                  | PWM          | Pulse Width Modulation                 |
| FP           | Front Pulse                              | Q            | Parity Data                            |
| FPG          | Front Pulse Gate                         | R,R1,R2,ect. | Data for Right Channel                 |
| F            | Frequency of Sampling                    | RAM          | Random Access Memory                   |
| GF           | Galois Field                             | RPG          | Rear Pulse Gate                        |
| H&V(Parity)  | Horizontal & Vertical                    | SCOOP        | Self Coupled Optical Pick-up           |
| IIR          | Infinite Impulse Response                | S&H          | Sample & Hold                          |
| KB           | Kilo Bits                                | S/N          | Signal to Noise Ratio                  |
| L,L1,L2,ect. | Data for Left Channel                    | SSG          | Standard Signal Generator              |
| LPF          | Low Pass Filter                          | SYSCON       | SYSTEM CONTROL                         |
| LSB          | Least Significant Bit                    |              |                                        |

# 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          | MultiPlex                     |
| 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               |
| BEFB          | and Elimination Filter          | OSC          | OSCillator (OSCillation)      |
| BSS           | Blank Search System             | P            | Pulse                         |
| CAPM          | CAPstan Motor                   | PB           | Play Back                     |
| CH            | CHannel                         | QMSS         | Quick Memory Search System    |
| COMP          | COMParator                      | OR           | Quick Reverse                 |
| CONT          | CONTinuance                     | RCH          | Right CHannel                 |
| CRLP          | Computer Recording Level        | REC          | RECORD (RECORDing)            |
|               | Processing                      | REV          | REVERSE                       |
| CS            | Chip Select                     | ROT          | ROTation                      |
| D/A           | Digital/Analog                  | REW          | REWind                        |
| DC            | Direct Current                  | SEC          | SECOnd                        |
| DET           | DETECTOR                        | SELE         | SELEctor                      |
| DISCRI        | DISCRIminator                   | SENS         | SENSitivity                   |
| DUB           | DUBbing                         | SEPP         | Single Ended Push Pull        |
| EQ            | EQualizer                       | SIG          | SIGnal                        |
| FF or (F.FWD) | Fast Forward                    | SPECT        | SPECTrum                      |
| FLD           | FLUorescent Display             | STD          | STANdard                      |
| FREQ          | FREQUENCY                       | SW           | SWitch                        |
| FWD           | FORWARD                         | SYSCON       | SYSTEM CONTROL                |
| GND           | GROUNd                          | TP           | TEST Point                    |
| H             | High                            | TRIG         | TRIGa                         |
| HPF           | High Pass Filter                | VCA          | Voltage Control Attenuator    |
| IND           | INDicator                       | VOL          | VOLUME                        |
| IPLS          | Instant Program Location System | VOLT         | VOLTage                       |
| L             | Low                             | VR           | Variable Resistor             |
| LCH           | Left Channel                    | XTAL         | CRYSTAL                       |
| LEDLight      | Emitting Diode                  | X1           | Normal speed                  |
| MEMO          | MEMOry                          | X2           | Double speed                  |
| MICOM         | MicroCOMputer                   |              |                               |

# AKAI

**AKAI ELECTRIC CO., LTD.**

Printed Date July 1997