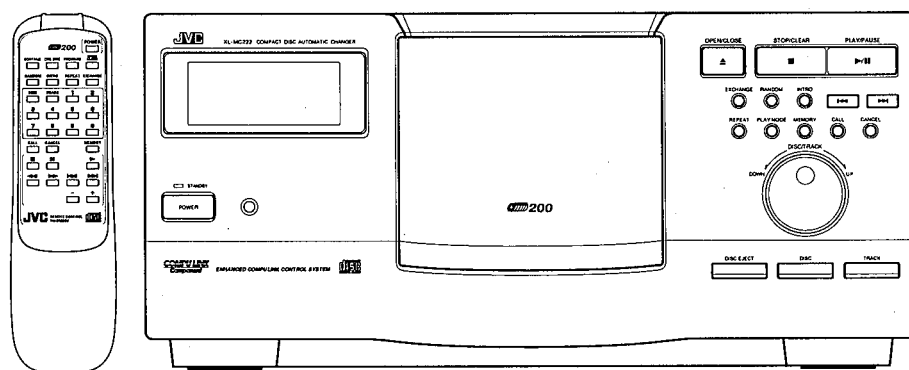


JVC

SERVICE MANUAL

COMPACT DISC AUTOMATIC CHANGER

XL-MC222BK



Area Suffix

BS	U.K
C	Canada
EF	Continental Europe Except Germany and Italy
EN	Nordic Countris
G	Germany
J	the U.S.A.
US	Singapore
UT	Taiwan
U	Universal except all of above

COMPU LINK
Component

COMPACT
disc
DIGITAL AUDIO

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Safety Precautions

1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
5. Leakage current check (Electrical shock hazard testing)

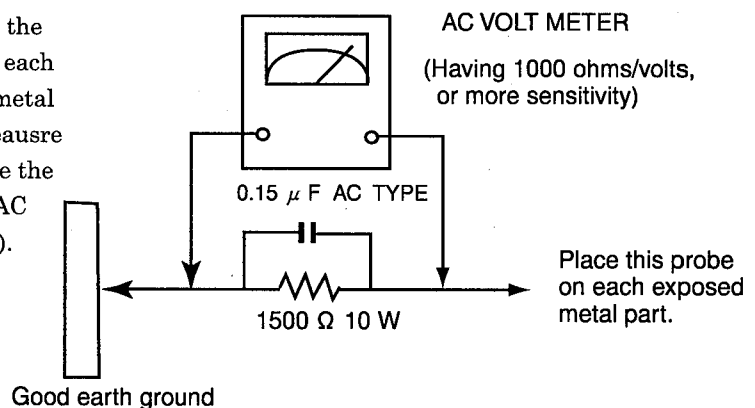
After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a Leakage Current Tester, measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

CAUTION Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.

Important for Laser Products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The compact disc player uses invisible laserradiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

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

VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen.

VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

ADVARSEL : Usynlig laserstrålning ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstrålning ved åbning, når sikkerhedsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABELS

WARNING LABEL

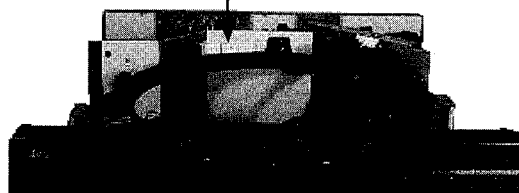
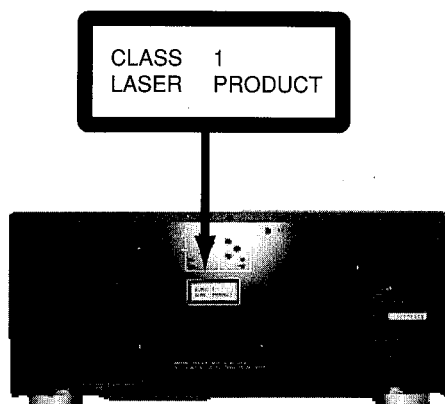
(Except for the U.S.A.and Canada and UP)

DANGER : Invisible laser radiation when open and interlock or defeated.
AVOID DIRECT EXPOSURE TO BEAM (e)

VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (d)

VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen. (s)

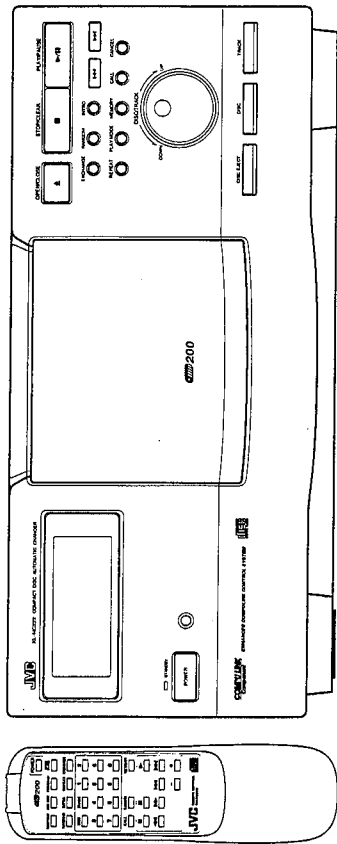
ADVARSEL :Usynlig laserstrålning ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling. (f)



JVC

COMPACT DISC AUTOMATIC CHANGER
XL-MC222BK

JVC
VICTOR COMPANY OF JAPAN, LIMITED



COMPACT
disc
DIGITAL AUDIO

INSTRUCTIONS

For Customer Use:
Enter below the Model No. and Serial No.
which are located on the rear, bottom or
side of the cabinet. Retain this information
for future reference.

Model No. _____
Serial No. _____

E30580-2620B
[J]

Printed in Japan
06977TYUBNOZK

EN

WARNING AND CAUTIONS



CAUTION
READ INSTRUCTIONS
BEFORE USE

TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol within an equilateral triangle alerts the user to the presence of "dangerous voltage" within the product's enclosure that could cause electric shock.

The exclamation mark within an equilateral triangle alerts the user to important operating and maintenance (servicing) instructions in the manual for the appliance.

For U.S.A.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when this equipment is operated normally. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1. Reorient or relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Caution — POWER switch
Disconnect the mains plug to shut the power off completely. The POWER switch in any position does not disconnect the mains line. The power can be remote controlled.

IMPORTANT FOR LASER PRODUCTS

1. CLASS 1 LASER PRODUCT
2. DANGER: Invisibile laser radiation when open and interlock failed or bypassed. Avoid direct exposure to beam.
3. CAUTION: Do not open the top cover. There are no user serviceable parts inside the player; leave all servicing to qualified service personnel.

CAUTION

- To reduce the risk of electrical shocks, fire, etc.:
1. Do not remove screws, covers or cabinet.
 2. Do not expose this appliance to rain or moisture.

INTRODUCTION

CONTENTS

Thank you very much for purchasing the JVC product. We sincerely hope it proves its quality and performance to your full satisfaction. Please read the instructions contained in this manual in order to get the most of the product's capability and performance. If there are any questions concerning the product, please consult your JVC dealer.	
Feature of XL-MC222 This component is designed to store up to 200 compact discs, change and play them automatically in three different playback modes.	
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PRECAUTIONS

Installation

- **Select the best location**
Select a level location to install this component, where it is free from extremes of temperature (5 to 35°C, or 41 to 95°F) and humidity, dust, or vibration.
If noise interference is caused in receiving AM broadcast by a tuner/receiver located nearby, relocate it or this component, or turn off either one.
- **Moving the unit**
Before moving the unit, first remove all the discs. Turn the power off, making sure the standby indicator is on. Then remove the AC power cord from the AC outlet.

Compact discs

- **Use only compact digital audio discs**
Only the audio compact discs identified by the logo shown below can be used with this component.



Operation

- **Keep the disc storage free of obstacles**
Do not put anything other than discs in slots of the disc storage.
- **Turn the power off if a problem occurs**
If an unusual condition arises, turn the power off immediately. If the condition persists whenever the power is turned on, consult your JVC dealer.
- **Do not pull the AC cord**
Do not pull the cable when unplugging the AC cord from the wall socket or this component — hold and pull the plug body.
- **Set the sound volume carefully**
Be careful in setting the sound volume on your amplifier/receiver when playing a CD, which has almost none of background noise unlike analog records and tapes. Find out the right setting starting with a low level setting. Setting the level too high and starting a CD could damage the speakers.
- **Protect the component against condensation**
Condensation on the component could disrupt the proper transmission of the disc-reading laser beam, causing noise or malfunction. If condensation ever ensues due to excessive humidity or sudden temperature change, leave the component turned on for a couple of hours to dry up — consult your JVC dealer if this does not correct the condition.

SETTING UP

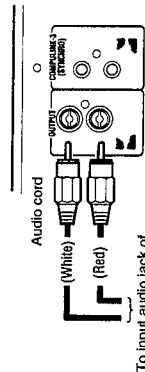
Connecting the unit

This compact disc changer/player needs to be connected to an amplifier/receiver for audio reproduction.

CAUTION

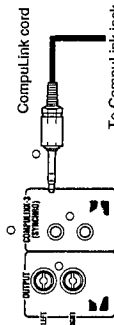
Do not connect the AC power cord until all other necessary connections have been made.

1. First connect the OUTPUT ports in the back of this unit with the CD or AUX input ports of the amplifier/receiver using the accessory audio cord. Be sure to insert the audio cord jacks firmly into the proper ports matching the output and input channels — RIGHT to RIGHT and LEFT to LEFT.



To input audio jack of the amplifier/receiver

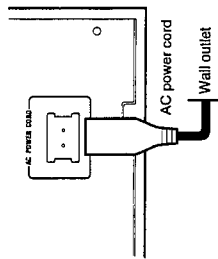
2. If you are connecting the unit to a JVC audio component and using the CompuLink-3 remote control system, connect the units with the accessory CompuLink cord. Either one of the COMPU LINK-3 (SYNCHRO) ports in the back of this unit can be used.



When you use the system, you can remote-control this CD unit from the connected JVC amplifier/receiver. (See Page 11 for more information.)

NOTE: JVC components equipped with two COMPU LINK-3 (SYNCHRO) ports can be connected in series; a component with only one port may be connected at the end of the series.

3. Connect the accessory AC power cord into the socket in the back of this unit. Then insert the cord plugs into an AC outlet. (Do not connect the power cord to a switched AC outlet of a component if the CompuLink system is used.)



Installing batteries in the remote control

1. There is a cover for the battery compartment on the back of the remote control. Press the cover down and slide it downward to remove it.
2. Set the two accessory batteries (1.5V R6P, AA) in the compartment with their polarities in proper positions.
3. Place the cover over the compartment, press it down, and slide it upward so that it firmly covers the compartment.

CAUTION

- Install the batteries with their polarities correctly set.
- Remove the batteries if the remote control is not going to be used for an extended period of time.
- Do not expose the remote control to heat, flame, or direct sunlight.

Replacing the batteries

The service life of batteries normally lasts for about one year though it is dependent on the use of the remote control (it is shortened in low temperatures, too). Replace the batteries any time if the controllable range is reduced (max. range: 7 meters or 23 feet and 30 degrees away from the component).

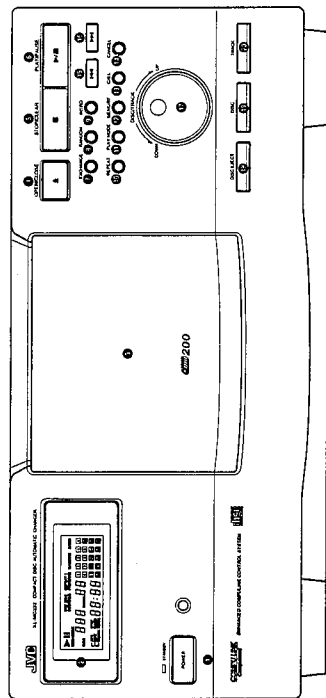
CAUTION

- Be sure to replace them with the correct batteries (1.5V, R6P, AA).
- Do not use new and old batteries in combination.

CONTROL PANEL AND REMOTE CONTROL

Control panel

Alphabetic letters in brackets following button names indicate their counterparts on the remote control.



POWER button [P]

Turns the power on or off. The STANDBY indicator above lights when the power is turned off and the unit is in the standby state; it goes out when the power is turned on. (To turn off the unit completely, unplug the power cord from the wall socket.)

Display

Shows the current operation status (see next page for more information).

Disc storage

Holds up to 200 discs in slots of a carousel, which rotates inside the disc storage.

OPEN/CLOSE button [O]

Opens or closes the door of the disc storage. The disc in the play position will be retracted into its carousel slot when the door is opened.

STOP/CLEAR button [S]

Stops playing the disc. Pressing the button in the PROGRAM mode clears all program steps if the unit is stopped.

PLAY/PAUSE button [▶, ⏸]

Retrieves a disc from the carousel slot, places it in the play position, and starts playing the disc; or interrupts the playing temporarily, or restarts the interrupted playing.

EXCHANGE button [X]

Opens the disc storage door without retracting the disc currently in the play position, and permits to change discs in the slots positioned in the front.

RANDOM button [R]

Selects or deselects the RANDOM playback function (see the description of playback modes).

INTRO button [I]

Selects or deselects the INTRO playback function (see the description of playback modes).

REPEAT button [R]

Selects or deselects the REPEAT or REPEAT 1 playback function (see the description of playback modes).

PLAY MODE button [P, M, E, O]

Selects in turn a mode of playing successive discs continuously (CONTINUE), one disc only (ONE DISC), or according to a program (PROGRAM). Refer to the description of each playback mode for details.

MEMORY button [M]

Enters specified disc and track numbers as a program step in the PROGRAM mode.

CALL button [C]

Displays the programmed steps for review or deletion in the PROGRAM mode.

CANCEL button [C]

Cancels the currently displayed program step (disc and track numbers) in the PROGRAM mode.

◀ (track skip/search backward) button [◀, B, ◀]

Skip tracks or search for a track backward. Holding down this button causes playback to fast backward.

▶▶ (track skip/search forward) button [▶▶, F, ▶▶]

Skip tracks or search for a track forward. Holding down this button causes playback to fast forward.

DISC/TRACK jog dial

Used to select a disc or track — the DISC or TRACK button located below the dial determines the dial function. "JOG" and "DISC" or "TRACK" will be shown on the display when the function is selected.

DISC EJECT button

Raises the disc in the load/unload position of the disc storage when its door is open. Pressing this button when the door is closed retrieves the disc from the play position and brings it to the load/unload position. The disc will then be popped up when the door is opened.

DISC button [D]

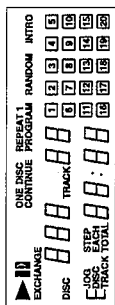
Selects the DISC/TRACK jog dial function for discs.

TRACK button [T]

Selects the DISC/TRACK jog dial function for tracks.

Display

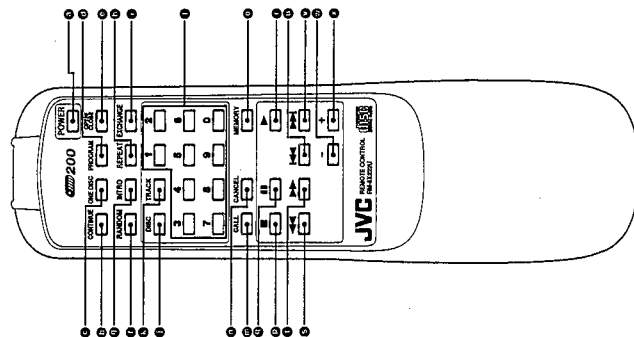
The information shown on the display of the control panel includes: current playback mode, function, disc (slot) and track numbers, program step number, track and total playing times, jog dial function, operation status, and track number table. The display with all elements shown is illustrated:



The track number table shows the tracks selected for the currently selected/discplayed disc. When a track is specified as the starting track, all track numbers following the specified track will be shown. The displaying of track numbers is available only up to 20, however.

Remote control

Numbers in brackets following button names indicate their counterparts on the control panel.



POWER button [P]

CONTINUE button

Directly selects the mode of playing successive discs continuously — instead of selecting the CONTINUE mode using the PLAY MODE button [P] on the front panel.

ONE DISC button

Directly selects the mode of playing one disc only — instead of selecting the ONE DISC mode using the PLAY MODE button [P] on the front panel.

PROGRAM button

Directly selects the mode of playing discs and tracks according to a program — instead of selecting the PROGRAM mode using the PLAY MODE button [P] on the front panel.

OPEN/CLOSE button [O]

RANDOM button [R]

INTRO button [I]

REPEAT button [R]

EXCHANGE button [X]

DISC button [D]

TRACK button [T]

Numeric buttons [0 through 9]

Used to specify a disc or track number.

CALL button [C]

CANCEL button [C]

MEMORY button [M]

◀ (stop) button [◀]

Stops playing the disc. Pressing the button in the PROGRAM mode clears all program steps if the unit is stopped.

⏸ (pause) button

Temporarily interrupts the playing of the disc.

▶▶ (play) button

Starts playing the disc, or restarts the interrupted playing.

◀ (track search backward) button

Searches for a track backward.

▶▶ (track search forward) button

Searches for a track forward.

◀ (track skip backward) button

Skips tracks backward.

▶▶ (track skip forward) button

Skips tracks forward.

– (disc skip backward) button

Skips discs backward.

+ (disc skip forward) button

Skips discs forward.

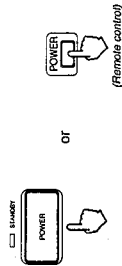
Caution

When using the remote control, be sure not to press the buttons quickly to ensure proper reception by the unit.

BASIC OPERATION

Turning the power on

Check that the standby indicator on the control panel is lighted. Then press the POWER button either on the control panel or remote control.



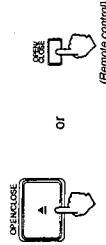
To turn the power off, press the button again lighting the standby indicator.

NOTE: Keeping the unit in the standby state consumes a minimal 6.5 watts. If necessary, unplug the power cord from the wall socket to turn off the power completely.

Loading compact discs

Also see Page 12 for the manner of handling and taking care of compact discs.

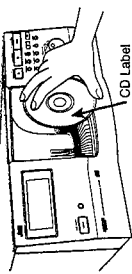
1. Press the OPEN/CLOSE button either on the control panel or remote control, opening the disc storage door and exposing carousel slots. "d-OP" is shown in the display.



2. To select a specific slot to load a disc, press the DISC button and turn the DISC/TRACK jog dial, to specify the required slot number, which is shown as "DISC" number on the display. The carousel rotates to bring the specified slot to the load/unload position, which is in the center of the storage area.



3. Place the disc in a slot, with its label facing to the left.



CAUTION

- Do not put anything except CDs in the storage area.
- 8 cm CDs cannot be played back in this unit.
- Be careful not to touch the playback mechanism in the unit.
- Up to 25 discs can be accessed at one time. Trying to insert or remove a disc which is not in the loading area may result in damage to the disc and unit.
- The disc needs to be placed vertically in the storage slot of this component. After taking the disc out of its case, grip the rim of the disc between your thumb and middle finger — be sure to keep the fingernails on the bottom, outermost strip where the surface is easily bright.
- Do not try to put more than one disc in a single slot. The unit will be damaged.

4. Repeat step 3, or steps 2 and 3, to load discs in the storage. Up to 200 discs can be loaded.

5. When all necessary discs have been loaded, press the OPEN/CLOSE button to close the storage door. "d-CL" is shown in the display.

CAUTION

Make sure to remove your hand from the storage opening before pressing the OPEN/CLOSE button.

Unloading/changing discs

1. Press the OPEN/CLOSE button to eject a disc in the playback position for unloading or changing.

2. To unload or change discs in other slots, press the DISC button and specify the slot number using the jog dial. The specified disc will be brought to the load/unload position. Then press the DISC EJECT button to raise the disc up.

Repeat this step to unload or change any additional discs.

3. When unloading or changing is completed, press the OPEN/CLOSE button to close the door. The disc in the load/unload position at this time will then be shifted to the play position.

Playing discs

1 Selecting a playback mode

There are three main playback modes, namely CONTINUE, ONE DISC, and PROGRAM; each has selective playback functions. (See the following pages for the description of the playback modes and functions.)

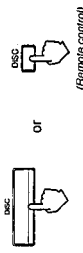
Select the mode using the PLAY MODE button on the control panel, or the CONTINUE, ONE DISC, or PROGRAM button on the remote controller.



2 Selecting a disc to play

To select a disc for playing, press the DISC button and then use the DISC/TRACK jog dial, or use the - or + buttons or numeric buttons on the remote control, showing the DISC (slot) number on the display.

NOTE: When you use the numeric buttons to specify the disc or track numbers, press the button in the order of larger digit. For example, press "5," then "2" for "52." Press "1," "4," and then "8" for "148."



3 Selecting a track

To select a track of the selected disc, from which the disc is to be played instead of starting from the beginning, press the TRACK button and then use the DISC/TRACK jog dial, - or + buttons or use the numeric buttons on the remote control, showing the required TRACK number on the display.

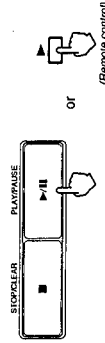


4 Starting the disc

Press the PLAY/PAUSE button or the ► button to play the selected disc or track.

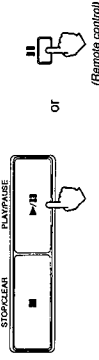
NOTE: After specifying the disc to be played and pressing the TRACK button, playback will begin automatically.

- In order to specify the track number to be played, the PLAY/PAUSE or ► button must be pressed.



Interrupting the playback

Press the PLAY/PAUSE or ► button to temporarily interrupt the playing, which can be resumed by pressing the PLAY/PAUSE or ► button.



Skipping discs/tracks during a playback

Discs and tracks may be skipped using the DISC/TRACK jog dial, - or + buttons in the same manner as their selection when permitted while a disc is being played.

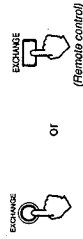
NOTE: When "JOG" is shown in the display, the ► button acts as the ENTER function and the pause function is disabled.

Changing discs during playback

The carousel slots positioned in the front behind the disc storage door are accessible for loading, unloading, or changing discs while a disc is being played. Press the EXCHANGE button to open the door. Press the EXCHANGE or OPEN/CLOSE button to close the door.

CAUTION

- Insert or remove discs very carefully at this time — the slots other than the center one are radially slanted toward the center of the carousel. Never try to rotate the carousel forcibly — it cannot be rotated when a disc is being played.
- Do not insert a disc outside of the loading area.
- A disc placed outside of the loading area is not registered and playback will not start.
- When you want to rotate the carousel, press OPEN/CLOSE button after closing the disc storage door.
- After loading/unloading discs, promptly close the disc storage door. Playback will not occur with the door in the open position.



Stopping the playback

Press the ► button to stop and cancel the playing.

NOTE: When "JOG" is shown in the display, the ► button acts as the CLEAR button and the stop function is disabled.



CONTINUE MODE PLAYBACK

Every loaded disc can be played entirely in the numerical order in the CONTINUE mode. After the playback of the last disc ends, the playback begins from the first disc.

Discs and tracks can be selected randomly from all the loaded discs and played (RANDOM function).

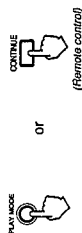
One track can be played repeatedly in the basic mode as well as when the RANDOM function is selected (REPEAT-1 function).

The beginning of the first track of every loaded disc can be played for 15 seconds (INTRO function).

Basic mode

1. Select the mode.

Use the PLAY MODE button, or press the CONTINUE button on the remote control, showing "CONTINUE" on the display.



2. Select a disc you want to start playing. The discs following the specified disc will be played continuously.

Press the DISC button and then use the DISC/TRACK jog dial. Or use the - or + button or numeric buttons.



3. Select the track if you want to start playing the disc from a specific track.

Press the TRACK button and then use the DISC/TRACK jog dial. Or use the <<< or >>> button or numeric buttons.

4. Press the PLAY/PAUSE button or the > button to start playing.

5. Discs and tracks can be skipped forward or backward during the playback using the <<< or >>> buttons. The playback can be paused or stopped in the normal manner. For further information, see [BASIC OPERATION] on pages 6 and 7.

Playing discs in random order

To play every disc in the storage in random order, press the RANDOM button showing "RANDOM" on the display. Then start the disc.

Playback order is continuous and discs and tracks are randomly selected. There is an approximately fifteen second pause between tracks.

Press the RANDOM button again while playback is stopped to cancel the function, clearing the indication from the display.

Playing a track repeatedly

A track of the selected disc can be played repeatedly. With a disc selected, press the REPEAT button, and select and show "REPEAT 1" on the display. Then start the disc to play the selected track repeatedly until you stop it.

This function can be used in the basic CONTINUE mode as well as when the RANDOM function is on.

Press the REPEAT button once to cancel the function, clearing the indication from the display.

NOTE: The REPEAT function is not available in the CONTINUE mode, as all discs are already being played back continuously.

Playing the beginning part of first tracks

To scan the first tracks of all discs, press the INTRO button to show "INTRO" on the display. The beginning part of the first track of each disc will be played for 15 seconds successively.

Press the INTRO button again to cancel the function, clearing the indication from the display. This function will continue until the > button is pressed.

ONE DISC MODE PLAYBACK

One disc can be selected and played entirely in the ONE DISC mode. The starting track may be specified.

Every track of the disc can be played once in a random order (RANDOM function).

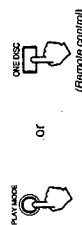
The entire disc can be played repeatedly (REPEAT function) or one selected track can be played repeatedly (REPEAT-1 function) in the basic mode as well as when the RANDOM function is selected.

The beginning part of every track of the disc can be played for 15 seconds (INTRO function).

Basic mode

1. Select the mode.

Use the PLAY MODE button, or press the ONE DISC button on the remote control, showing "ONE DISC" on the display.



2. Select a disc you want to play.

Press the DISC button and then use the DISC/TRACK jog dial. The - or + buttons as well as the numeric buttons can also be used.



3. Select the track if you want to start playing the disc from a specific track.

Press the TRACK button and then use the DISC/TRACK jog dial. The <<< or >>> buttons as well as the numeric buttons can also be used.



4. Press the PLAY/PAUSE button or the > button to start the disc, playing it from the first track or from the specified track through the last track.

5. Tracks can be skipped forward or backward during the playback using the <<< or >>> button. The playback can be paused or stopped in the normal manner. For further information, see [BASIC OPERATION] on pages 6 and 7.

Playing the tracks in random order

To play every track of the disc, which has been selected in Step 2 above, once in random order, press the RANDOM button following Step 2, showing "RANDOM" on the display. Then press the PLAY/PAUSE button or > button. The playback will be stopped when all tracks have been played.

Press the RANDOM button again to cancel the function, clearing the indication from the display during stop.

Playing the disc repeatedly

To repeatedly play the entire disc selected in Step 2 above, press the REPEAT button, and select and show "REPEAT 1" on the display. Then start the disc to play it repeatedly until stopped.

This function can be used in the basic ONE DISC mode as well as when the RANDOM function is effective.

Press the REPEAT button twice to cancel the function, clearing the indication from the display.

Playing a track repeatedly

To repeatedly play the track selected in Step 3 above, press the REPEAT button, and select and show "REPEAT 1" on the display. Then start the disc to play the selected track repeatedly until stopped.

This function can be used in the basic ONE DISC mode as well as when the RANDOM function is effective.

Press the REPEAT button once to cancel the function, clearing the indication from the display.

Playing the beginning part of all tracks

To scan the tracks of the selected disc, press the INTRO button to show "INTRO" on the display. The beginning part of each track will be played for 15 seconds. The playback will be stopped when the scan is completed.

Press the INTRO button again to cancel the function, clearing the indication from the display.

PROGRAM MODE PLAYBACK

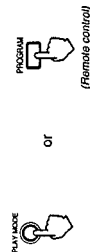
Discs and tracks can be selectively specified in a program and played according to the program in the PROGRAM mode.

The steps in the program can be played in a random order (RANDOM function).

The entire program can be played repeatedly (REPEAT function) or one program step can be selected and played repeatedly (REPEAT-1 function) in the basic mode as well as when the RANDOM function is selected.

Basic mode

1. Select the mode.
Use the PLAY MODE button, or press the PROGRAM button on the remote control, showing "PROGRAM" on the display.



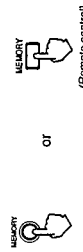
2. Specify disc or track numbers in the order you want to play in the following manner:

- (a) Specify a disc number and a track number.
Press the DISC or TRACK button and then use the DISC/TRACK Jog dial. The -- or + buttons as well as the numeric buttons can also be used.



The track number can be omitted when programming a whole disc to be played.
Press the CANCEL button to cancel the specified disc and track numbers shown on the display.

- (b) Press the MEMORY button to register the specification as program step 1.



Up to 32 steps can be entered in one program. Each disc, when the whole disc is to be played, or each track programmed is counted as one step.

- (c) Repeat Steps (a) and (b) above to program the remaining steps.

Reviewing the steps:

Press the CALL button. One step is displayed each time the button is pressed.

Deleting a step:

Press the CALL button and display the necessary step. Then press the CANCEL button.

Adding a step:

An added step is placed in the last step automatically.

Deleting all steps:

Press the STOP/CLEAR button. The entire program will be cleared.

3. Press the PLAY/PAUSE button or the ► button to start playing according to the program.

The program reviewing and modification procedures described above can also be performed when the playback is stopped.

The program will be retained and available whenever the PROGRAM mode is selected again as long as the unit is kept in the standby state.

If the AC power cord is disconnected from the outlet, the program will be erased.

Playing program steps in random order

To play every step in the program once in random order, press the RANDOM button, showing "RANDOM" on the display. Then start playing.

The playback will be stopped when all program steps have been played.

If the disc specified in the program is not in the disc storage, the playback stops. The playback starts again after you load the disc and press the PLAY/PAUSE button or the ► button on the remote control.

Press the RANDOM button again to cancel the function, clearing the indication from the display during stop.

Playing the program repeatedly

To repeat playback according to the program, press the REPEAT button, and select and show "REPEAT" on the display. Then start playing, which will be repeated until stopped.

This function can be used in the basic PROGRAM mode as well as when the RANDOM function is effective.

Press the REPEAT button twice to cancel the function, clearing the indication from the display during stop.

Playing a program step repeatedly

To repeatedly play a specific program step, select the step using ◀◀ or ▶▶ buttons during playback, press the REPEAT button twice and show "REPEAT 1" on the display. The selected step is played back repeatedly.

This function can be used in the basic PROGRAM mode as well as when the RANDOM function is effective.

Press the REPEAT button once to cancel the function, clearing the indication from the display.

COMPLINK-3 REMOTE CONTROL SYSTEM

The CompuLink system, which is a JVC-developed remote control system, links JVC audio components to establish systematized operation control of the linked components.



NOTE: There are three versions of the CompuLink system: CompuLink-1, -2, and -3. Although they are basically compatible, some functions may not be available with the older versions (refer to the instructions manual of the component for the information).

The CompuLink-3 Remote Control System provides the following functions:

Automatic power on/off

Turning a linked component on or off will automatically turn the amplifier/receiver on or off.
Selecting a source on the amplifier/receiver will turn on the relevant component.

CAUTION

- Be sure to use the accessory CompuLink cable for the connection.
- The operation may be disrupted if the power supply to a component is interrupted, in which case turn off all linked components and turn them on again.

Automatic source selection

Selecting a source on the connected amplifier/receiver will automatically turn on the relevant component and start its operation. Starting a linked component will automatically select the relevant source on the amplifier/receiver.

Synchronized recording

This function is effective when a JVC cassette deck is linked in the CompuLink system, allowing simple, synchronized recording.

NOTE: Refer to the instruction manual of your cassette deck for the detail of the synchronized recording.
Some functions are disabled in order to prevent the recording trouble during the synchronized recording.

HANDING AND TAKING CARE OF DISCS

Handling compact discs

Protect the disc from being scratched, warped, or damaged in any other way — the plastic disc can easily be damaged and the damaged disc disrupts sound reproduction and the player function.

Keep every disc in its case

Be sure to keep every disc in its case whenever it is taken out of the player. Placing one disc upon another without putting them in their cases will damage their recorded tracks.

Keep the label side clean

Do not attempt to put adhesive tape or paper nor write anything even on the label side of a disc.

Cleaning compact discs

If the underside of a disc is soiled with fingerprints, etc., use a piece of soft, dry cloth and wipe clean the surface from the inside to the outside in straight strokes. If that does not clean the surface, try with a piece of soft cloth moistened with water.

Never use alcohol, record cleaners, or anti-static agents.



Storing compact discs

Do not store compact discs where they may be exposed to direct sunlight or extremes of temperature and humidity. Also, avoid leaving them in the car.



SPECIFICATIONS & PACKING LIST

General

Readable discs:

CD

Other

Power requirements:

AC 120V ~, 60Hz

Power consumption:

11 W (POWER ON),

6.5 W (STANDBY mode)

Mass:

7.8 kg (17.2 lbs)

Dimensions (W x H x D):

435 x 199.5 x 482.5 mm

17-3/16 x 7-1/4 x 19 inch

Audio output

ANALOG OUT (pin jack x 2): 2.0 Vrms

The package contains the following items:

- 1 XL-MC222 Compact Disc Automatic Changer
- 1 RM-SX222U Remote Control
- 2 Remote control batteries (1.5V, R6P, AA)
- 1 Instructions manual
- 1 CD booklet file
- 1 Audio cord



- 1 CompuLink cord



- 1 AC power cord



TROUBLESHOOTING

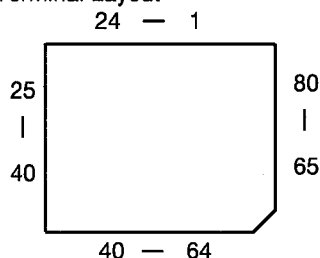
What appears to be a malfunction may not always be serious and can easily be corrected. The table below describes some typical problems and their remedies. Check them before calling your JVC dealer.

Symptom	Possible Cause	Remedy
The CD is not played.	The CD is not loaded.	Load the disc.
	The CD is not placed in the slot with its label on the left side.	Reload the disc correctly.
	A disc has been placed outside of the loading area.	Specify the slot number and open the disc storage door. Then close the door.
	The CD is damaged.	Replace the disc with a new one.
	The AC power cord is disconnected.	Connect the cord securely.
	The audio cord is disconnected.	Connect the cord securely.
The sound is intermittent or harsh.	The CD is soiled.	Clean the surface using a piece of soft cloth.
	The CD is scratched or warped.	Replace the disc with a new one.
	A piece of paper or adhesive tape is stuck to the CD surface.	Remove it cleanly.
	The audio cord is placed close to the AC powercord.	Separate them.
	The batteries are exhausted.	Replace the batteries.
The remote controller does not properly work.	The remote controller is not properly used.	Its maximum range is 7 meters (23 feet) and 30 degrees away from the component.
The component does not operate.	The built-in microcomputer is not properly functioning due to static electricity or other disturbance.	Disconnect the AC power cord and connect it again.

— MEMO —

■ HD6433726SD56F (IC201) SYSTEM CONTROLLER

1.Terminal Layout



2.Key Matrix

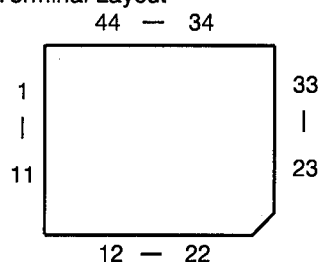
	KEY IN0	KEY IN1	KEY IN2	KEY IN3	KEY IN4
KEY OUT0	EJECT	STOP	PLAY/PAUSE	EXCHANGE	-
KEY OUT1	RANDOM	INTRO	⏮	⏭	-
KEY OUT2	REPEAT	PLAY MODE	MEMORY	CALL	-
KEY OUT3	DISC	TRACK	DISC EJECT	CANCEL	POWER

3.Description

Pin No.	Symbol	I/O	Description	Pin No.	Symbol	I/O	Description
1	/FLON	I	FL On signal input	42	KI1	I	Key matrix input
2	NC	-	Non connect	43	KI2	I	Key matrix input
3	NC	-	Non connect	44	KI3	I	Key matrix input
4	NC	-	Non connect	45	KI4	I	Key matrix input
5	AVss	-	GND	46	JOG1	I	Jog signal input
6	TEST	-	Connect to GND	47	JOG2	I	Jog signal input
7	X2	-	Non connect	48	NC	-	Non connect
8	X	-	Pull up	49	NC	-	Non connect
9	Vss	-	GND	50	NC	-	Non connect
10	OSC1	I	Clock osillation input	51	NC	-	Non connect
11	OSC2	O	Clock osillation output	52	NC	-	Non connect
12	/RST	I	Reset signal input	53	NC	-	Non connect
13	/RMIN	I	Remote controle signal input	54	NC	-	Non connect
14	/STAT	I	Status signal input	55	NC	-	Non connect
15	/P.ON	O	Power on/off control signal	56	NC	-	Non connect
16	SDA	I/O	Serial data I/O with to IC401	57	Vcc	-	Power supply
17	SCL	O	Serial clock to IC401	58	LOAD	O	Load motor on signal output
18	DCSOUT	O	DCS Signal output	59	UNLOAD	O	Unload motor on signal output
19	DCSIN	I	DCS Signal input	60	C.STRAGE	O	Strage motor clockwise on signal output
20	NC	-	Non connect	61	CC.STRAGE	O	Strage motor counterclockwise on signal output
21	LOADSW	I	Disc load detect signal input	62	D.OPEN	O	Door open signal output
22	UNLOADSW	I	Disc unload detect signal input	63	D.CLOSE	O	Door close signal output
23	OPENS	I	Door open detect signal input	64	/LSI.RST	O	Reset signal output to IC603
24	CLOSESW	I	Door close detect signal input	65	/REST.SW	I	Rest switch input
25	POPUPSW	I	Disc popup detect signal input	66	NC	-	Non connect
26	POPDOWNSW	I	Disc popdown detect signal input	67	SQCK	O	Outside clock for sub-code Q resister output
27	NC	-	Non connect	68	SUBQ	I	Sub-code Q-code input
28	NC	-	Non connect	69	NC	-	Non connect
29	NC	-	Non connect	70	MCLK	O	Micom command clock signal output
30	NC	-	Non connect	71	/MILD	O	Micom command load signal output
31	NC	-	Non connect	72	MDATA	O	Micom command data signal output
32	NC	-	Non connect	73	FLSTB	O	Strobe signal to IC701
33	NC	-	Non connect	74	FLDATA	O	FL Display data to IC701
34	NC	-	Non connect	75	FLCLK	O	Clock signal to IC701
35	NC	-	Non connect	76	AVcc	-	Power supply
36	KO0	O	Key matrix output	77	PHOTO1	I	Photo switch signal input
37	KO1	O	Key matrix output	78	PHOTO2	I	Photo switch signal input
38	KO2	O	Key matrix output	79	PHOTO3	I	Photo switch signa input
39	KO3	O	Key matrix output	80	D.SENS	I	Disc sensor terminal input
40	-VISP	-	Power supply				
41	KI0	I	Key matrix input				

■ MSC7112-01GS-2K (IC701) : Flourescent Display Driver

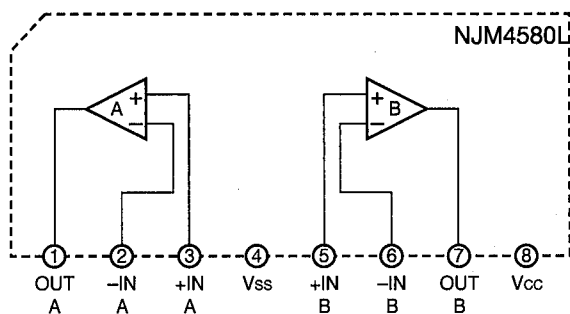
1.Terminal Layout



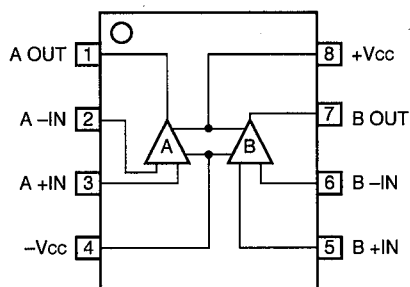
2.Description

Pin No.	Symbol	I/O	Description
1	D12	-	Non connect
2~5	LED1~LED4	O	LED drive signal
6	LED5	O	Non connect
7	Vss	-	V _{DD} -V _{SS} : Power supply for the internal logic circuit
8	V _{EE}	-	V _{DD} -V _{EE} : Power supply for the FL drive circuit
9	SEGP	-	Non connect
10	SEGO	-	Non connect
11~16	SEGN~SEGI	O	FL display tube drive signal
17	V _{EE}	-	V _{DD} -V _{EE} : Power supply for the FL drive circuit
18~25	SEGH~SEGA	O	FL display tubu drive signal
26	SCLK	I	Clock signal for the display data
27	DATAIN	I	Display data from IC201
28	LOAD	I	Strobe signal from IC201
29	OSC I	I	Input to the oscillator circuit. Oscillator circuit is made up by connecting an external capacitor and resitor
30	OSC O	O	
31	/POR	I	Reset signal input to the internal logic circuit when turning on
32	V _{DD}	-	Power supply
33	D1	-	Non connect
34~38	D2~D6	O	FL display tube drive signal
39	V _{EE}	-	V _{DD} -V _{EE} : Power supply for the FL drive circuit
40~44	D7~D11	O	FL display tube drive signal

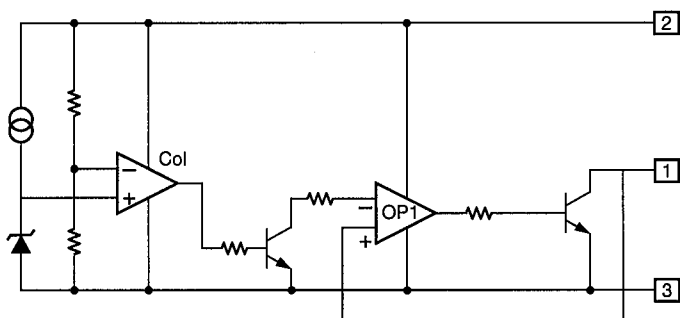
■ NJM4580L(IC801,802) : Dual OP Amp.



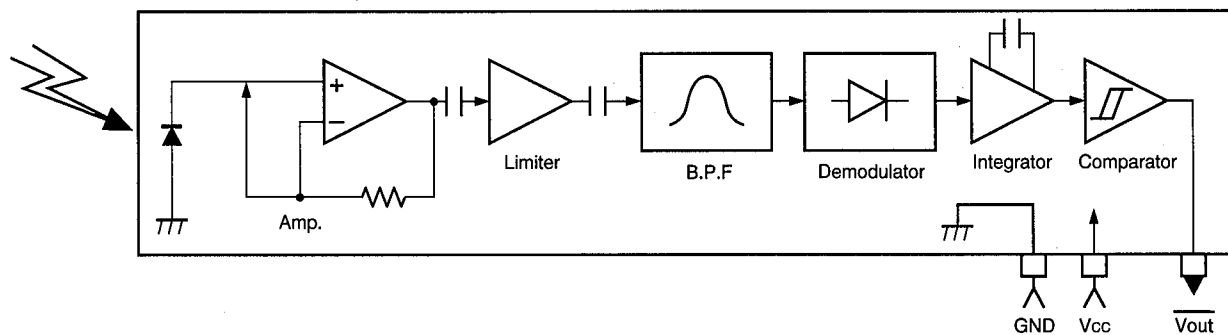
■ NJM4580D(IC301) : Dual OP



■ PST9140T(IC202) : Reset

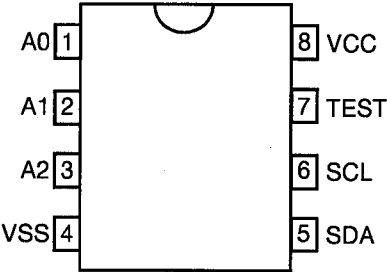


■ GP1U281X(IC702) : Receiver for remote controller



■ AT24C04-10PC (IC401) : Serial E²PROM

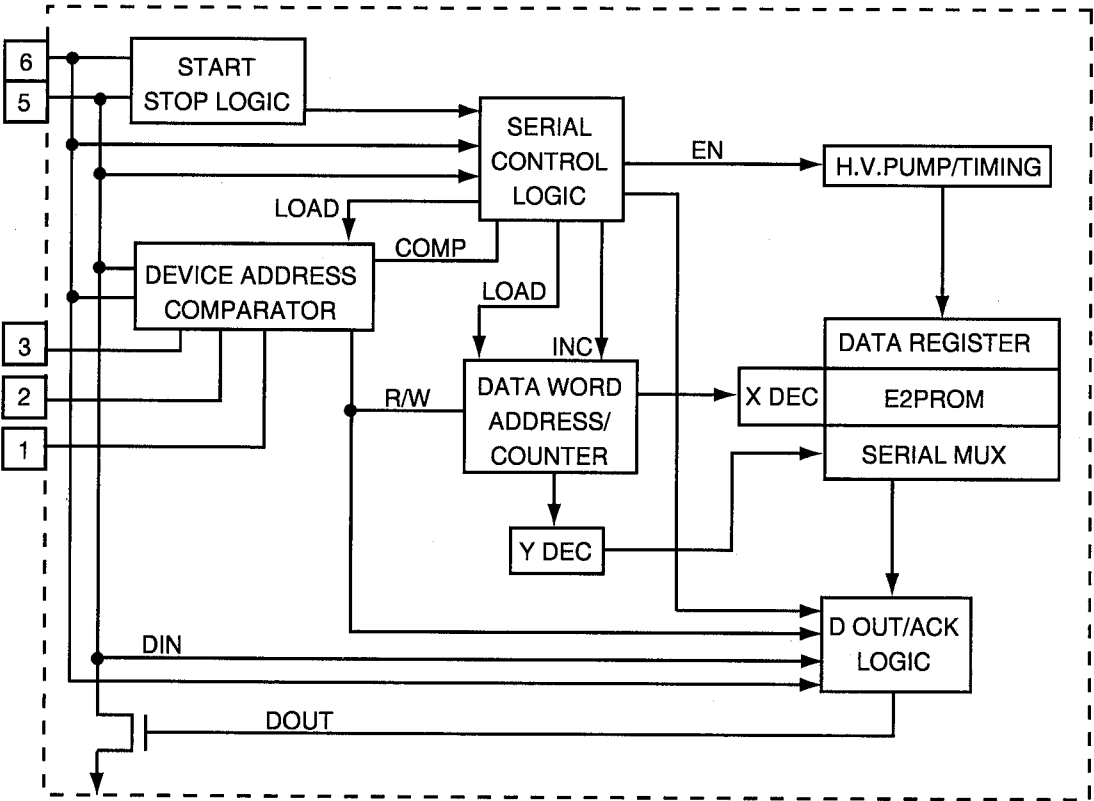
1. Terminal Layout



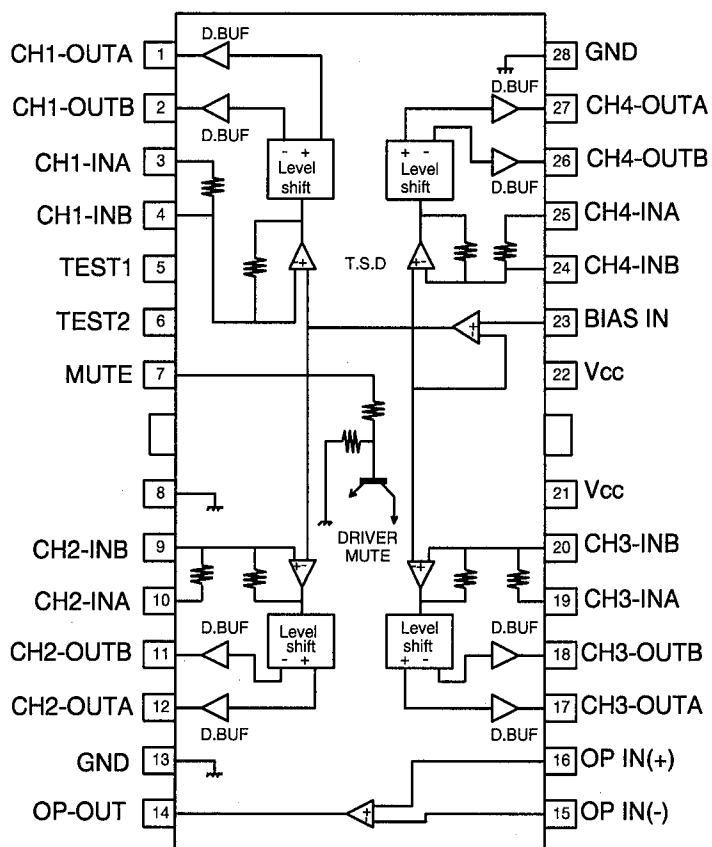
2. Functions

Pin No.	Symbol	Functions
1-3	A0-A2	ADDRESS INPUT (Connected to GND)
4	VSS	GND
5	SDA	SERIAL DATA
6	SCL	SERIAL CLOCK
7	TEST	TEST PIN (NOT USE)
8	VCC	POWER SUPPLY

3. Block Diagram



■ BA6897FPW(IC602) 4channel driver

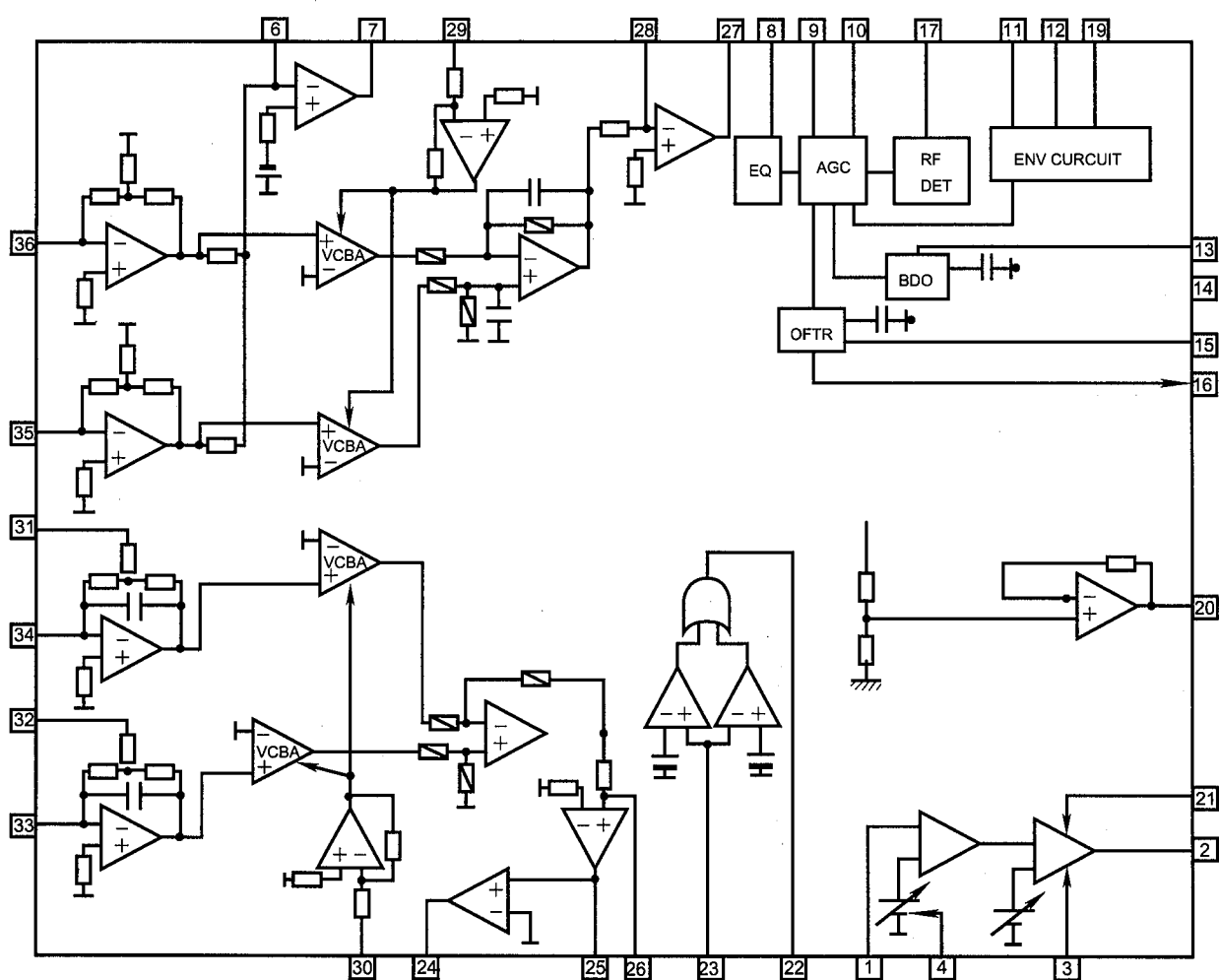


■ AN8806SB(IC601):RF&SERVO AMP

1.Terminal Layout

PD 1	36 PDAC
LD 2	35 PDBD
LDON 3	34 PDE
LDP 4	33 PDF
VCC 5	32 PDER
RF- 6	31 PDFR
RF OUT 7	30 TBAL
RF IN 8	29 FBAL
C.AGC 9	28 EF-
ARF 10	27 EF OUT
C.ENV 11	26 TE-
C.EA 12	25 TE OUT
CS BDO 13	24 CROSS
BDO 14	23 TE BPF
CS BRT 15	22 VDET
OFTR 16	21LD OFF
/NRFDET 17	20 VREF
GND 18	19 ENV

2.Block Diagram



3. Functions

Pin No.	Symbol	I/O	Functions and operations
1	PD	I	APC amp input terminal
2	LD	O	APC amp output terminal
3	LD ON	I	APC ON/OFF control terminal
4	LDP	--	Connect to ground
5	VCC	--	Power supply
6	RF-	I	Inverse input pin for RF amp
7	RF OUT	O	RFamp output
8	RF IN	I	RF input
9	C.AGC	I/O	Connecting pin of AGC loop filter
10	ARF	O	RF output
11	C.ENV	I/O	A capacitor is connected to this terminal to detect the envelope of RF signal
12	C.EA	I/O	A capacitor is connected to this terminal to detect the envelope of RF signal
13	CS BDO	I/O	A capacitor is connected to detect the lower envelope of RF signal
14	BDO	O	BDO output pin
15	CS BRT	I/O	A capacitor is connected to detect the lower envelope of RF signal
16	OFTR	O	Of-track status signal output
17	/NRFDET	O	RF detection signal output
18	GND	--	Ground
19	ENV	O	Envelope output
20	VREF	O	Reference voltage output
21	LD OFF	--	Connect to ground
22	VDET	O	Vibration detection signal output
23	TE BPF	I	Input pin of tracking error through BPF
24	CROSS	O	Tracking error cross output
25	TE OUT	O	Tracking error signal output
26	TE-	I	Inverse input pin for tracking error amp
27	FE OUT	O	Output pin of focus error
28	FE-	I	Inverse input pin for focus error amp
29	FBAL	I	Focus balance control
30	TBAL	I	Tracking balance control
31	PDFR	I/O	F I-V amp gain control
32	PDER	I/O	E I-V amp gain control
33	PDF	I	I-V amp input
34	PDE	I	I-V amp input
35	PD BD	I	I-V amp input
36	PD AC	I	I-V amp input

	20	~	1
21			80
3			3
40			61
	41	~	60

The diagram illustrates the internal architecture of the Philips TDA1564Q, a high-performance audio IC. It is organized into several main functional sections:

- Input and Control Section:** Includes the A/D CONVERTER, INPUT, and SERVO TIMING GENERATOR at the bottom. It also features a MICRO COMPUTER INTERFACE and a VCO (Voltage Controlled Oscillator) for ITUNING GENERATION, PITCH CONTROL, and X2/X1 functions.
- Processing Section:** Contains the EFM DEMODULATION, SYNC INTERPOLATION, and SUBCODE DEMODULATION blocks. These are connected to a 16k SRAM and a CIRC ERROR CORRECTION DEINTERLEVE block. The SERVO block is also part of this section.
- Output and Interface Section:** Includes the DIGITAL AUDIO INTERFACE, INTER POLATION, SOFT MUTING, DIGITAL ATTENUATION, PEAK DETECTIVE, and AUTO CUE blocks. These lead to the OUTPUT PORT, which drives the D/A CONVERTER.
- Power and Timing Section:** Features the DIGITAL DEEMPHASIS, 8TIMES OVERSAMPLING DIGITAL FILTER, and 18BIT DAC LOGIC S blocks. These are connected to the PEM (R) and PEM (L) blocks, which drive the output amplifiers.
- External Connections:** The IC has numerous pins for control and data, including LKCKIN(MSEL), BCLK(SSEL), SRDATAIN (PSEL), IOSEL, CLVS, CRC, BLKCK, CLDCK, SBCK, SUBC, DEMPH, RESY, FLAG6(RESY), SSEL, SQCK, SUBQ, AVDD2, PCK, EFM, PLLF, DSLF, IREF, DRF, ARF, RSEL, PSEL, MLD, MCLK, MDATA, CK384(EFM), VCOF, BYTCK, SMCK, FCLK, CSEL, MSEL, X2, X1, and ESTA.

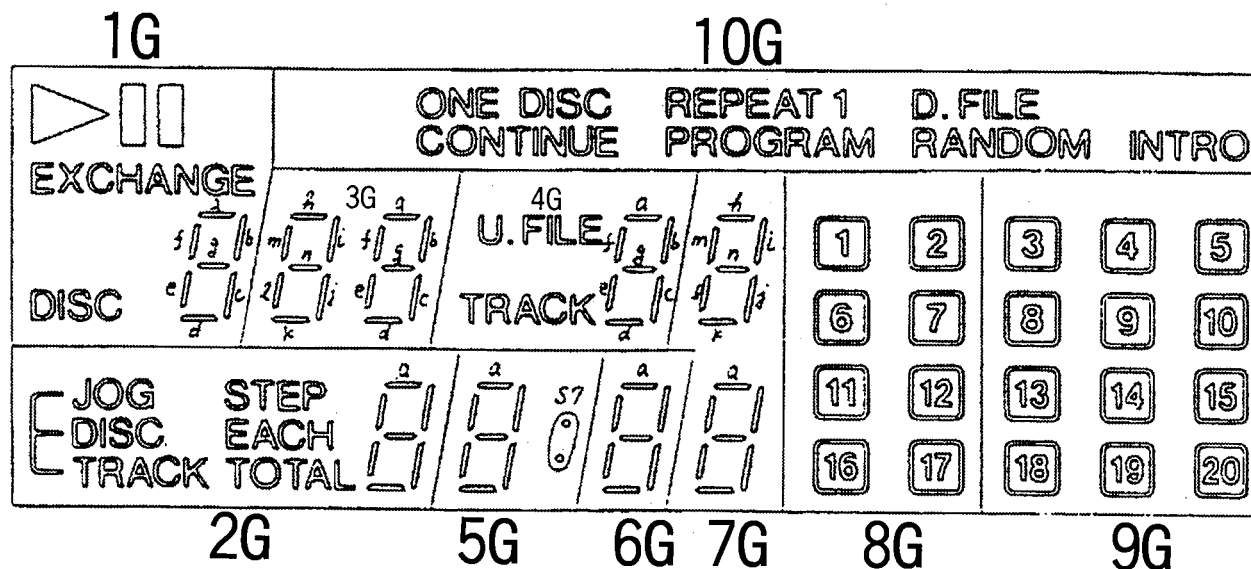
The diagram shows the complex interconnections between these blocks, highlighting the IC's capability for high-fidelity audio processing and digital control.

3. Description

Pin No.	symbol	I/O	Description	Pin No.	symbol	I/O	Description
1	BCLK	O	Not used	41	TES	O	Tracking error shunt signal output(H:shunt)
2	LRCK	O	Not used	42	PLAY	—	Not used
3	SRDATA	O	Not used	43	WVEL	—	Not used
4	DVDD1	—	Power supply (Digital)	44	ARF	I	RF signal input
5	DVSS1	—	Connected to GND	45	IREF	I	Reference current input pin
6	TX	O	Digital audio interface output	46	DRF	I	Bias pin for DSL
7	MCLK	I	μ com command clock signal input (Data is latched at signal's rising point)	47	DSLIF	I/O	Loop filter pin for DSL
8	MDATA	I	μ com command data input	48	PLLIF	I/O	Loop filter pin for PLL
9	MLD	I	μ com command load signal input	49	VCOF	—	Not used
10	SENSE	O	Sence signal output	50	AVDD2	—	Power supply(Analog)
11	FLOCK	O	Focus lock signal output Active :Low	51	AVSS2	—	Connected to GND(Analog)
12	TLOCK	O	Tracking lock signal output Active :Low	52	EFM	—	Not used
13	BLKCK	O	sub-code•block•clock signal output	53	PCK	—	Not used
14	SQCK	I	Outside clock for sub-code Q resister input	54	PDO	—	Not used
15	SUBQ	O	Sub-code Q -code output	55	SUBC	—	Not used
16	DMUTE	—	Connected to GND	56	SBCK	—	Not used
17	STATUS	O	Status signal (CRC,CUE,CLVS,TTSTOP,ECLV,SQOK)	57	VSS	—	Connected to GND(for X'tal cscillation circuit)
18	RST	I	Reset signal input (L:Reset)	58	X1	I	Input of 16.9344MHz X'tal oscillation circuit
19	SMCK	—	Not used	59	X2	O	Output of X'tal oscillation circuit
20	PMCK	—	Not used	60	VDD	—	Power supply(for X'tal cscillationcircuit)
21	TRV	O	Traverse enforced output	61	BYTCK	—	Not used
22	TVD	O	Traverse drive output	62	CLDCK	—	Not used
23	PC	—	Not used	63	FLAG	—	Not used
24	ECM	O	Spindle motor drive signal (Enforced mode output) 3-State	64	IPPLAG	—	Not used
25	ECS	O	Spindle motor drive signal (Servo error signal output)	65	FLAG	—	Not used
26	KICK	O	Kick pulse output	66	CLVS	—	Not used
27	TRD	O	Tracking drive output	67	CRC	—	Not used
28	FOD	O	Focus drive output	68	DEMPH	—	Not used
29	VREF	I	Reference voltage input pin for D/A output block (TVD,FOD,FBA,TBAL)	69	RESY	—	Not used
30	FBAL	O	Focus Balance adjust signal output	70	IOSEL	—	pull up
31	TBAL	O	Tracking Balance adjust signal output	71	TEST	—	pull up
32	FE	I	Focus error signal input(Analog input)	72	AVDD1	—	Power supply(Digital)
33	TE	I	Tracking error signal input(Analog input)	73	OUT L	O	Lch audio output
34	RF ENV	I	RF envelope signal input(Analog input)	74	AVSS1	—	Connected to GND
35	VDET	I	Vibration detect signal input(H:detect)	75	OUT R	O	Rch audio output
36	OFT	I	Off track signal input(H:off track)	76	RSEL	—	pull up
37	TRCRS	I	Track cross signal input	77	CSEL	—	Connected to GND
38	RFDET	I	RF detect signal input(L:detect)	78	PSEL	—	Connected to GND
39	BDO	I	BDO input pin(L:detect)	79	MSEL	—	Connected to GND
40	LDON	O	Laser ON signal output(H:on)	80	SSEL	—	Pull up

Internal Connections for FL Display Tube

Grid Layout



Anode Designaiton

	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
S1	ONE DISC	3	1	h			U. FILE	h	STEP	▷
S2	CONTINUE	4	2	i			TRACK	i	EACH	□□
S3	REPEAT	5	6	m				m	TOTAL	EXCHANGE
S4	1	8	7	n				n	JOG	DISC
S5	PROGRAM	9	11	j				j	€	
S6	D. FILE	10	12	l				l	DISC	
S7	RANDOM	13	16	k		S7		k	TRACK	
S8	INTRO	14	17	a	a	a	a	a	a	a
S9		15		b	b	b	b	b	b	b
S10		18		f	f	f	f	f	f	f
S11		19		g	g	g	g	g	g	g
S12		20		c	c	c	c	c	c	c
S13				e	e	e	e	e	e	e
S14				d	d	d	d	d	d	d

Pin Connection

TERMINAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
ELECTRODE	F	F	NP	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	P S14	P S13	P S12				
TERMINAL NO.						17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ELECTRODE						P S11	P S10	P S9	P S8	P S7	P S6	P S5	P S4	P S3	P S2	P S1	NX	NP	F	F

Notes F: Filament NP: No Pin
G: Grid NX: No Extend Pin
P: Anode

Disassembly Procedures

1. Top cover removal

- 1) Remove 4screws"A" fastening both the top cover.
- 2) Remove 3screws"B" fastening rear side the top cover.
- 3) Remove the top cover.

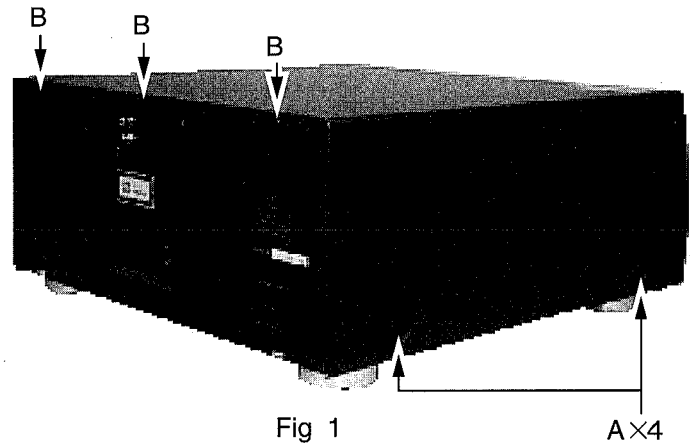


Fig 1

2. Front panel removal

- 1) Remove the top cover
- 2) Remove 3screws"C" fastening bottom side the front panel assembly.
- 3) Remove the flat wire.
- 4) Remove 2screws"D" fastening the PCB(ENN-501-7)
- 5) Release 4hooks to remove the front panel assembly.

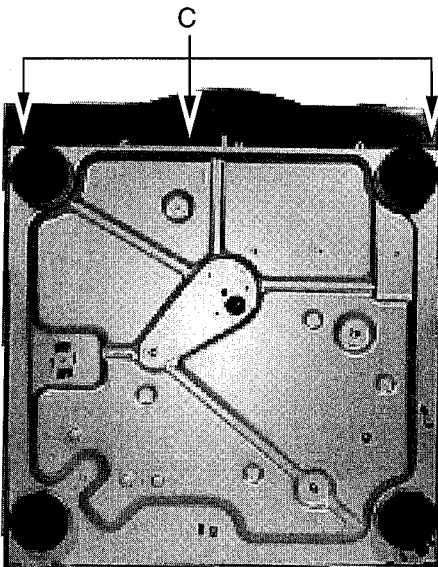


Fig 2

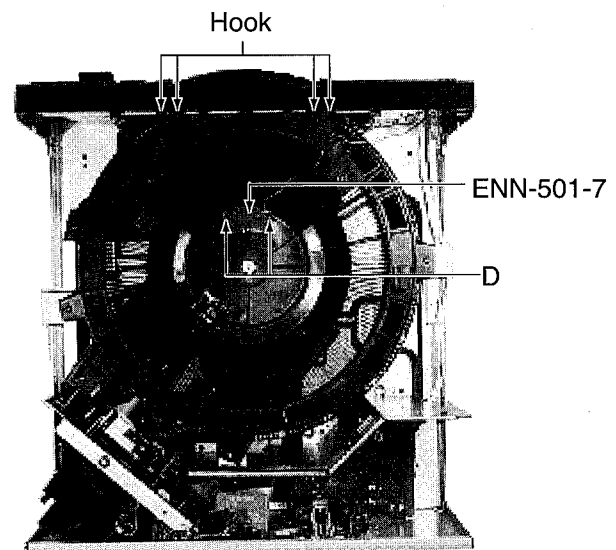


Fig 3

3. Disc storage removal

- 1) Remove the front panel.
- 2) Remove 7 screws "E" fastening the disc guard(L) and disc guard(R)
- 3) Release hook to remove the disc guard.
- 4) Remove 2 screws "F" fastening the loading guide.
- 5) Remove screw "H" fastening the safty cover to remove it.
- 6) Remove the disc storage.

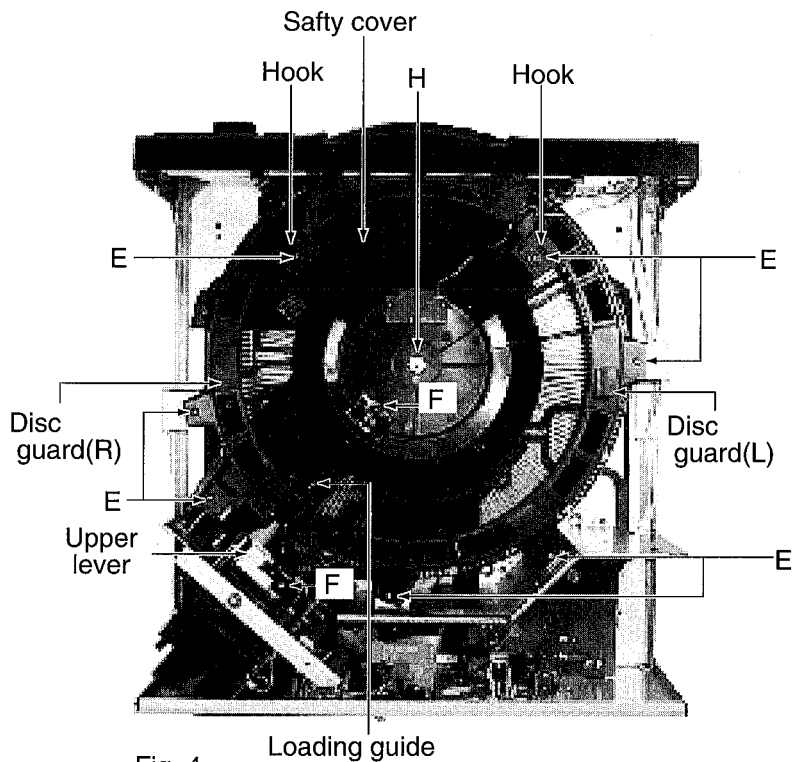


Fig 4

4.Center strage removal

- 1) Remove the disc storage.
- 2) Remove 8 screws "I" fastening the support bracket to remove it.
- 3) Remove 24 screws "J", "K" fastening the center storage to remove it.

* 20 screws "K" is except "I" "J" (Fig 5)

5.Center storage assembly

- 1) Tighten 4 screws "J"
- 2) Mount the support bracket by 8 screws "I" and then drive 20 screws "K".

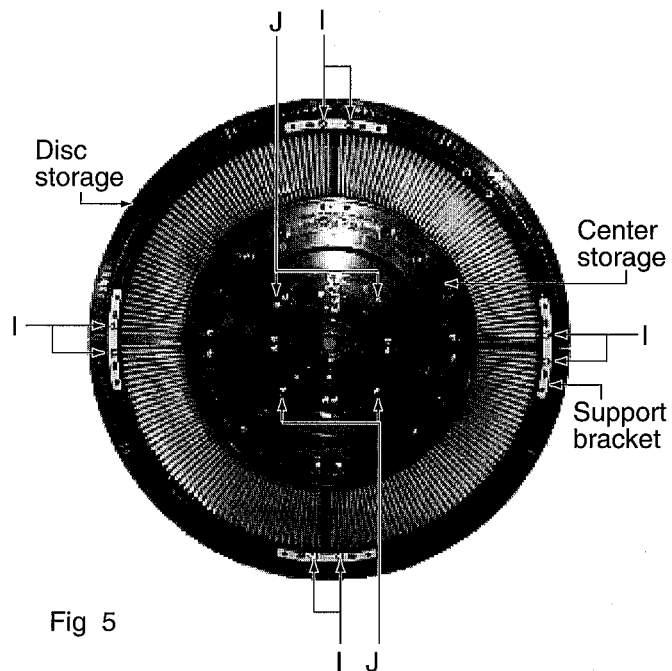


Fig 5

6.Raer panel removal

- 1) Remove the top cover
- 2) Remove 11 screws "L" fastening the rear panel to remove it.

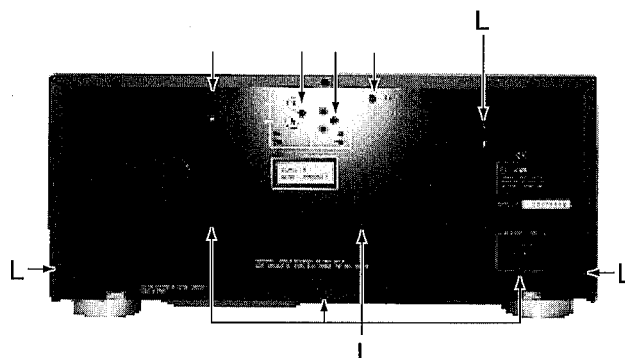


Fig 6

7. Micro computer PCB (ENN-501-3) removal

- 1) Remove the rear panel
- 2) Disconnect the connectors (CN611,CN903, CN905,CN901,CN101,CN711,CN991) to remove the micro computer PCB.

8. Main gear removal

- 1) Remove the disc storage.
- 2) Release hook to remove the door lock.
- 3) Release hook to remove the ST. lock lever.
- 4) Remove screw "M" fastening the wheel gear to remove it.
- 5) Remove screw "N" fastening the main gear to remove it.

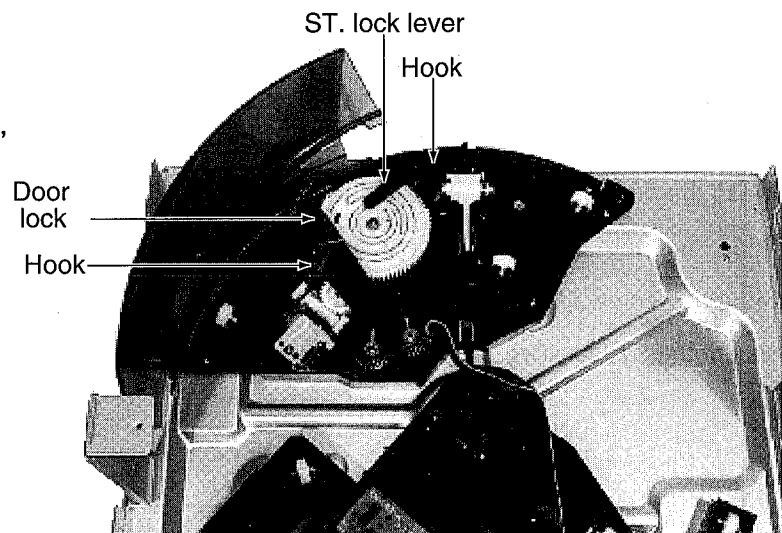


Fig 7

9. Door removal

- 1) Remove the main gear
- 2) Release hook to remove the door

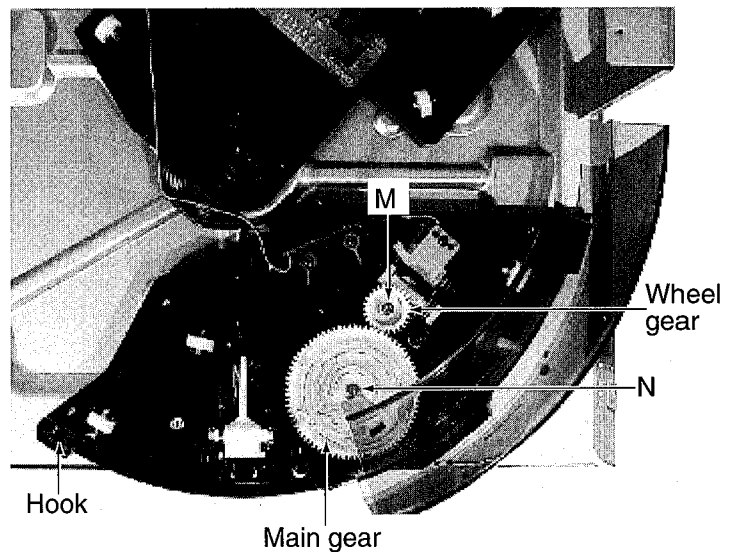


Fig 8

10. Mounting and operation check of the main gear.

- 1) Move the slide cam to the backward end.
- 2) Mount (by screws) the main gear such that the rectangular window faces in the direction shown in figure 9.
- 3) Make sure that the pop up lever rises when the main gear is rotated counterclockwise by 1/4 turn.

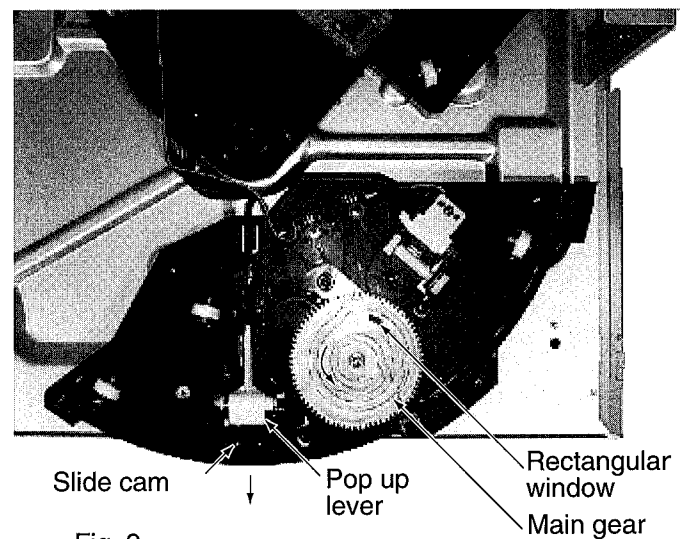


Fig 9

11. Mounting the door

- 1) Fully turn the main gear clockwise.
- 2) Insert the door in the groove of the base and slide it to a point just in front of main gear.
- 3) Mesh the door gear with the main gear(see Figure 10).
- 4) Slide the door further to a point where 4 to 5 teeth are kept disengaged.
- 5) Mount(by screws)the wheel gear.
- 6) Mount the ST.lock lever and door lock at specified positions(see Figure 11)

Align the first tooth of the door at "*" mark

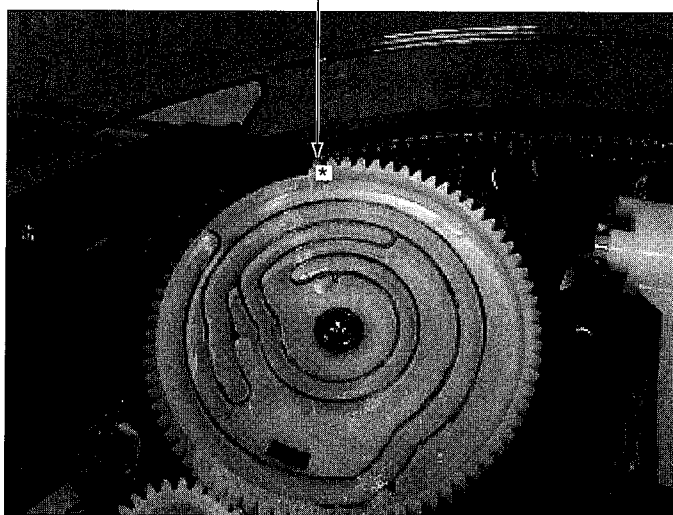
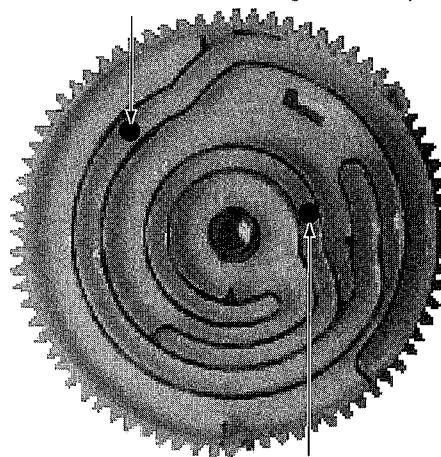


Fig 10

Where to insert door lock
(the position after mounting the door)



Where to insert ST.lock lever
(the position after mounting the door)

Fig 11

12.CD mechanism assembly removal

- 1) Remove the disc storage.
- 2) Remove the rear panel.
- 3) Remove 3screws "O" fastening the drop proof bracket to remove it.
- 4) Disconnect the connectors (CN601,CN602)
- 5) Remove screwfastening the servo PCB (ENN-501-2) to remove it.
- 6) Remove 4srews "P" fastening the CD mechanism assembly.
- 7) Rotate gear "A" in the direction of the arrow until the loading lever is lowered.
- 8) Release hook to remove the clamber base.Here be careful not to allow the spring to pop out.
- 9) Release the shaft to remove the CD mechanism assembly.

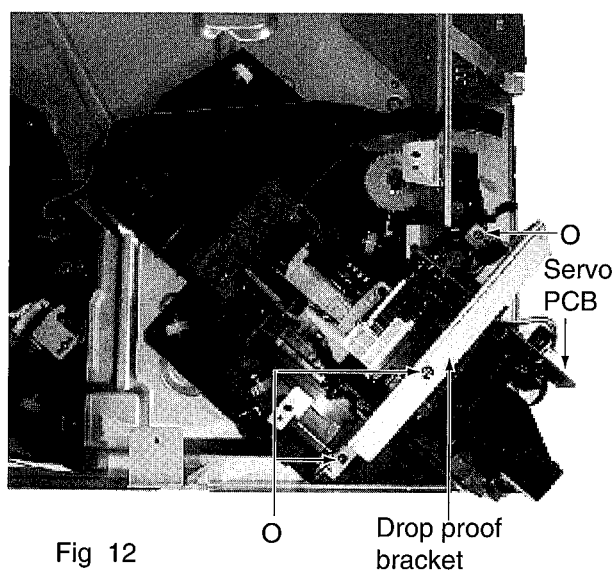


Fig 12

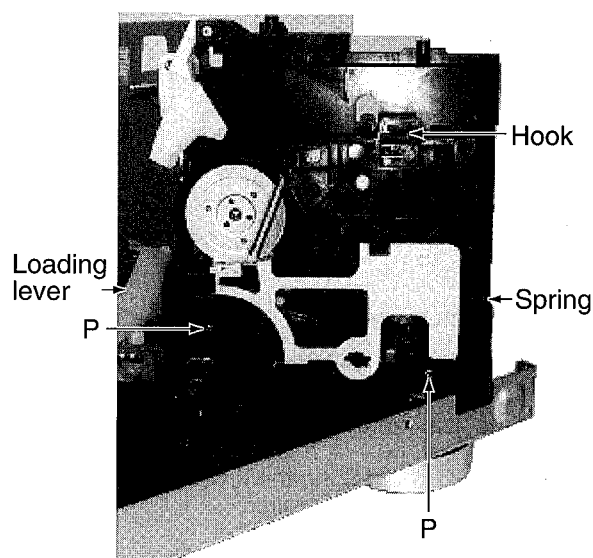


Fig 13

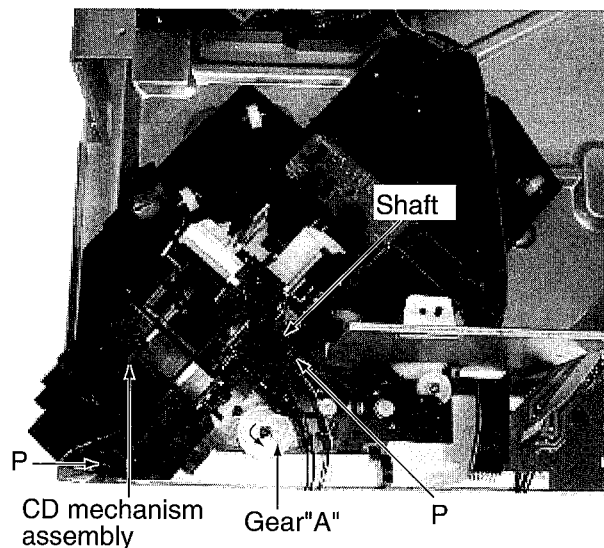


Fig 14

13. Pick up removal

- 1) Remove the CD mechanism assembly.
- 2) Release hook to remove the traverse mecha unit.
- 3) Remove the 3 screws "Q" fastening the insulator bracket to remove it.
- 4) Remove the 2 spacers.
- 4) Release 2 hooks to remove the traverse mecha unit from insulator.
- 5) Release the shaft to remove the pick up.

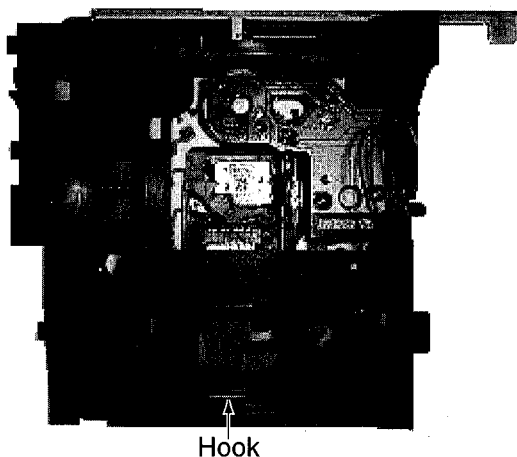


Fig 15

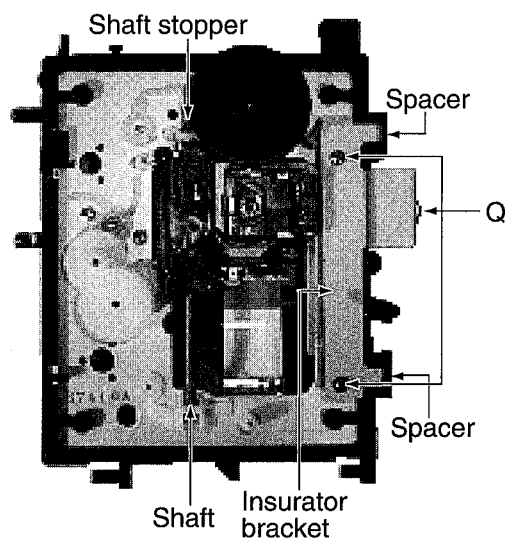


Fig 16

14. Lever base assembly removal

- 1) Remove the CD mecha assembly.
- 2) Release hook to remove the lock lever.
- 3) Remove 3 screws "R" fastening the lever base assembly.
*Be also careful not to lose the roller.

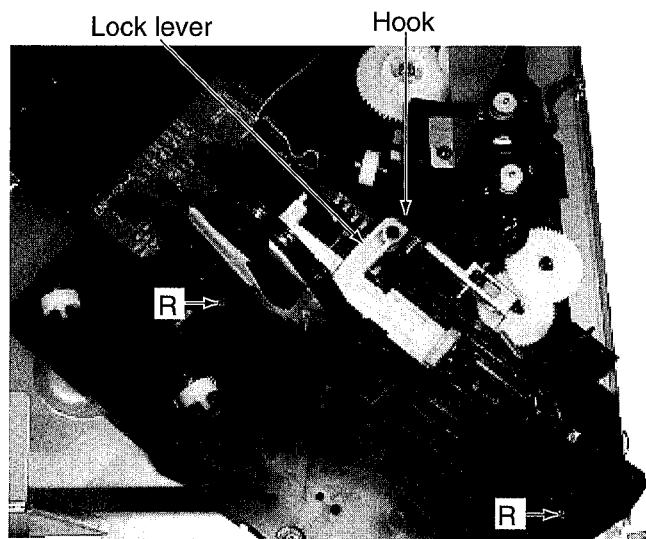


Fig 17

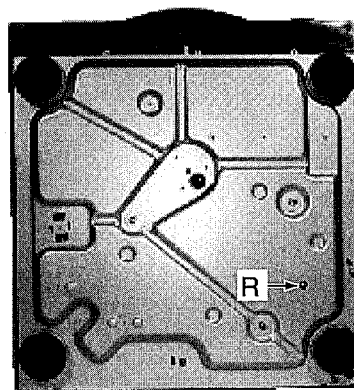


Fig 18

15. Assembling the lever base assembly

- 1) According to Figure 19, move the cam to specified position "a".
- 2) With the loading lever slightly raised, insert the roller in groove "b" of the lever base.
- 3) Tighten 3 screws "R".

Operation check

- 1) After parts other than the belt are all mounted, check operation.
- 2) Make sure that both LOADING and UNLOADING switches turn ON when the cam is moved back and forth (see Figure 19)
- 3) The unloading lever shall be at the position shown in Figure 21

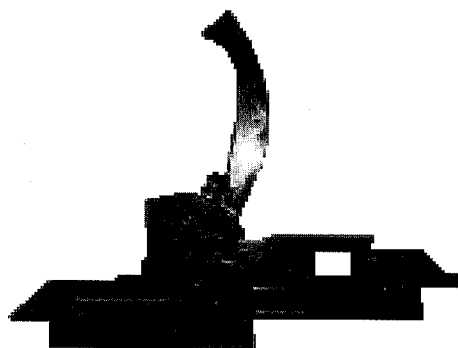
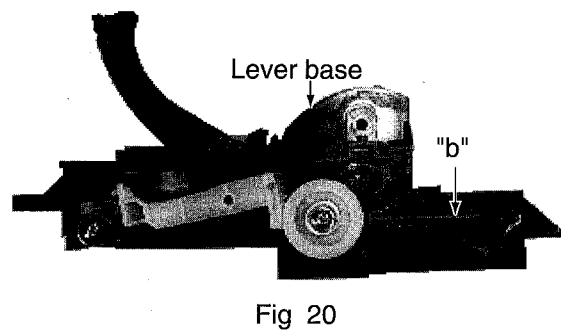
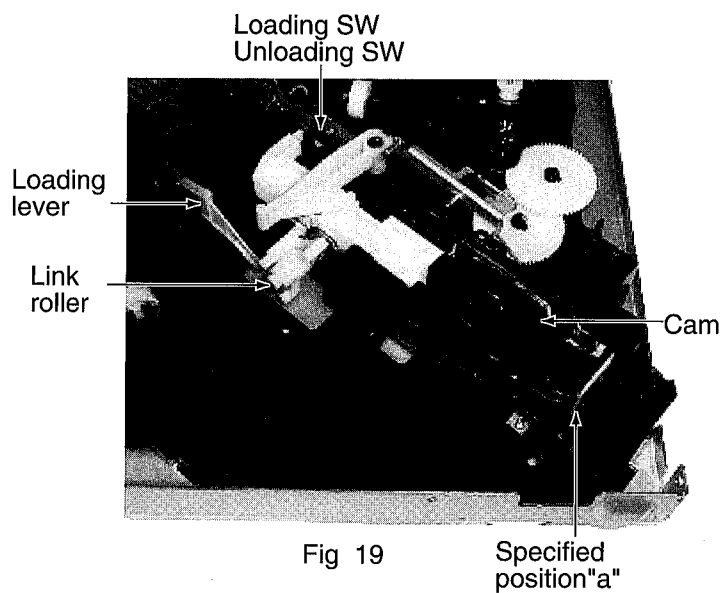


Fig 21

16.CAM removal

- 1) Removal the lever base assembly
- 2) Removal screw "S" fastening the cam cover to remove it
- 3) Release the spring to remove the loading lever
*Be also careful not to lose the link roller.
- 4) Release hook to remove the link lever.
- 5) Release hook to remove the load link.
- 6) Release hook to remove the CAM

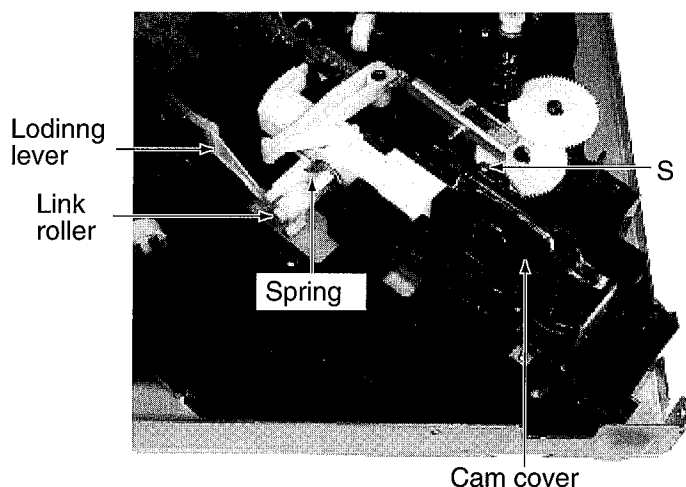


Fig 22

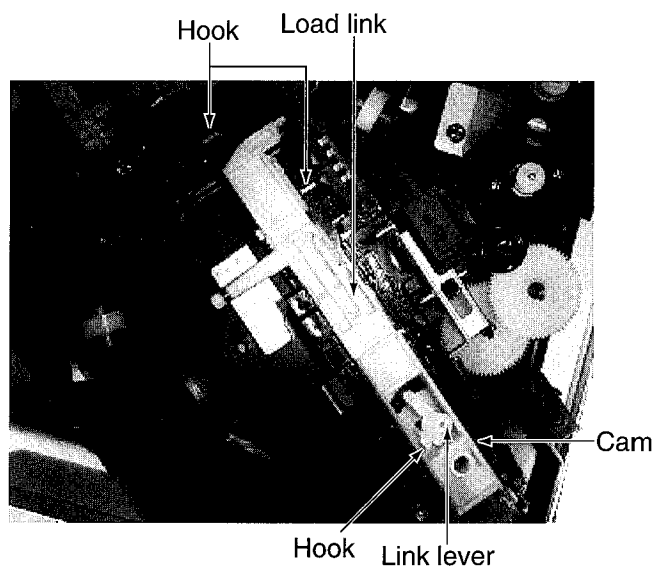


Fig 23

17.Assembling the loading lever

- 1) According to Figure 24 ,mount the spring on the loading lever.
- 2) Insert it in the loading link in the direction shown in Figure 24.Here hook the spring on the claw of the loading link.(This operation shall carefully be done so that the lever is not lifted,for example,by pinching the spring between the link the lever.)
- 3) Rotate the lever counterclockwise and insert it in the mechanical base.
Temporarily fix the lever by cellophane tape or the like.
- 4) Be careful in doing this that the lever repels under spring force.

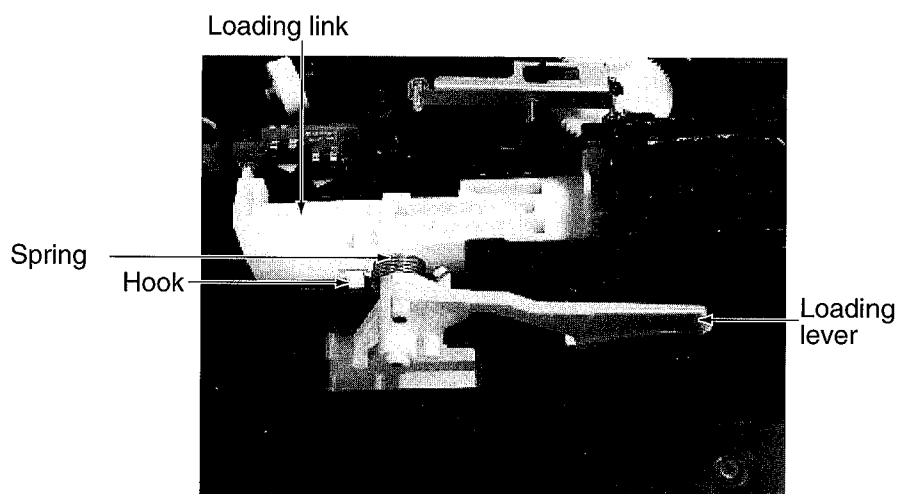


Fig 24

18. Assembling the cam

1) Let the arrow marked face in Figure 25 under mechanical bases "c" and "d" and then the rib of mechanical base "f" in the groove of mechanical base "e". then slide it to the rectangular window mechanical base "g" according to Figure 27.

2) Align the cam at this position.

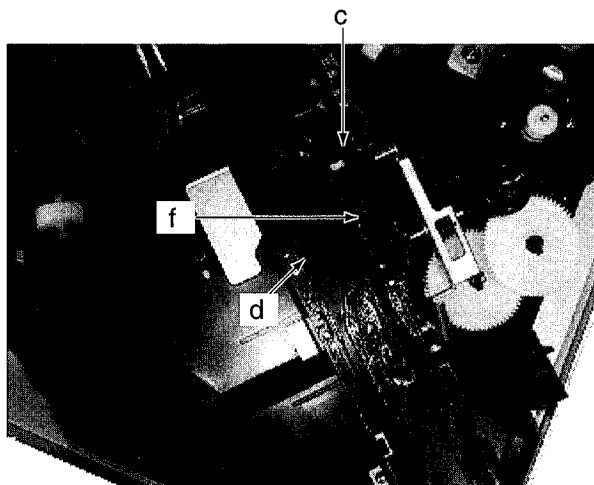


Fig 25

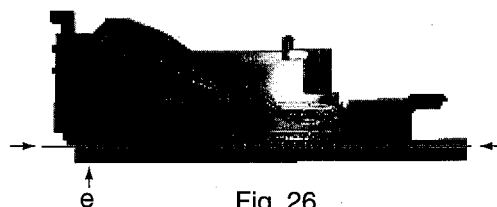


Fig 26

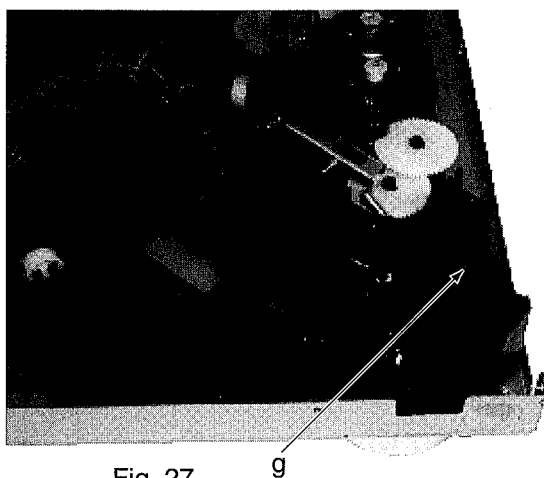


Fig 27

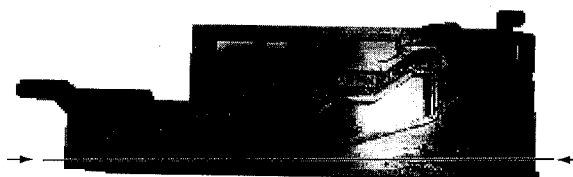
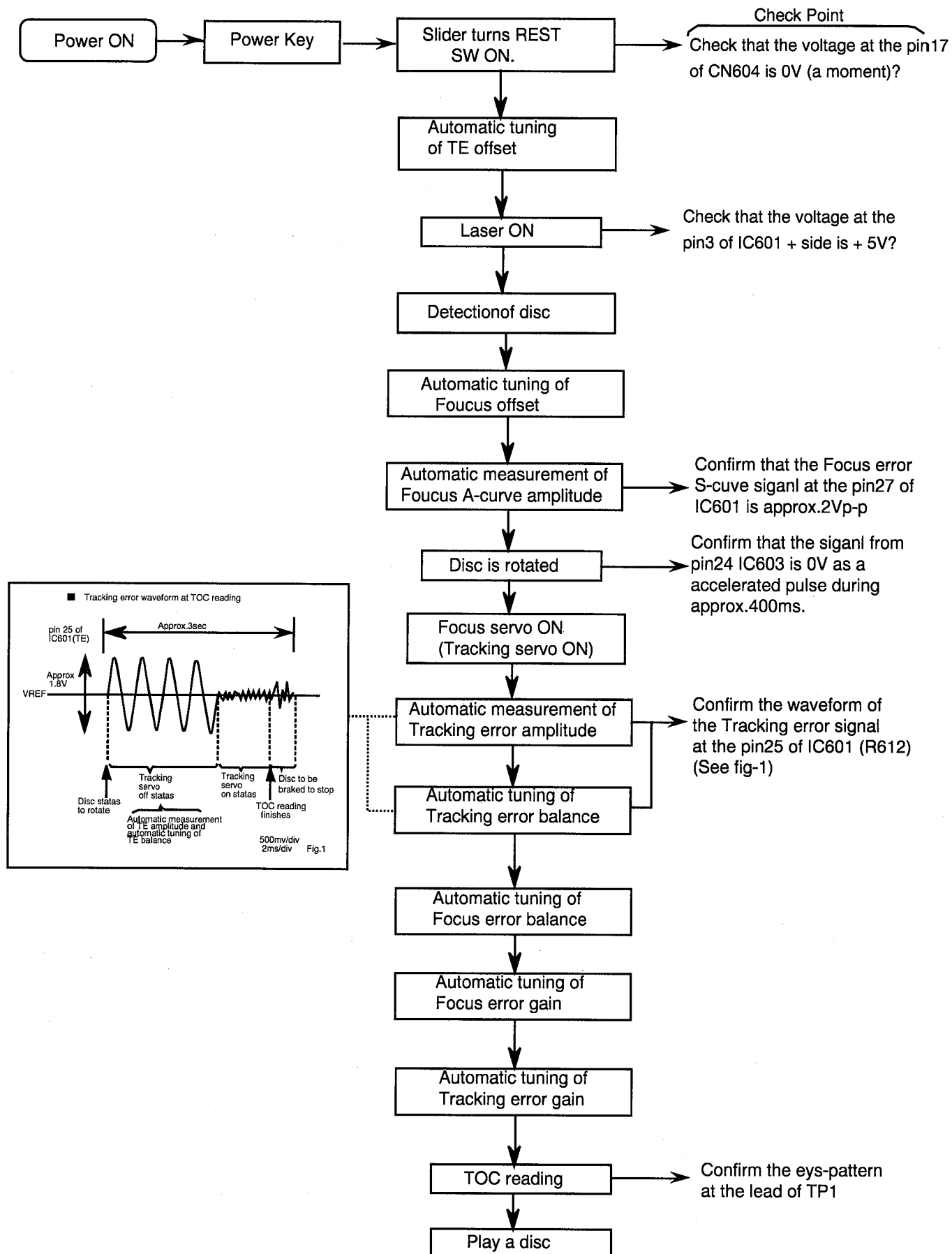


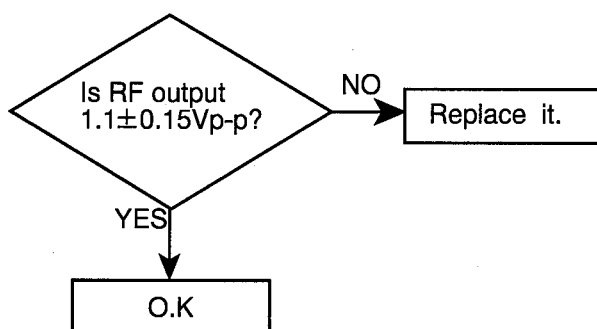
Fig 28

Flow of Functional Operation Until TOC Read



Maintenance of Laser Pickup

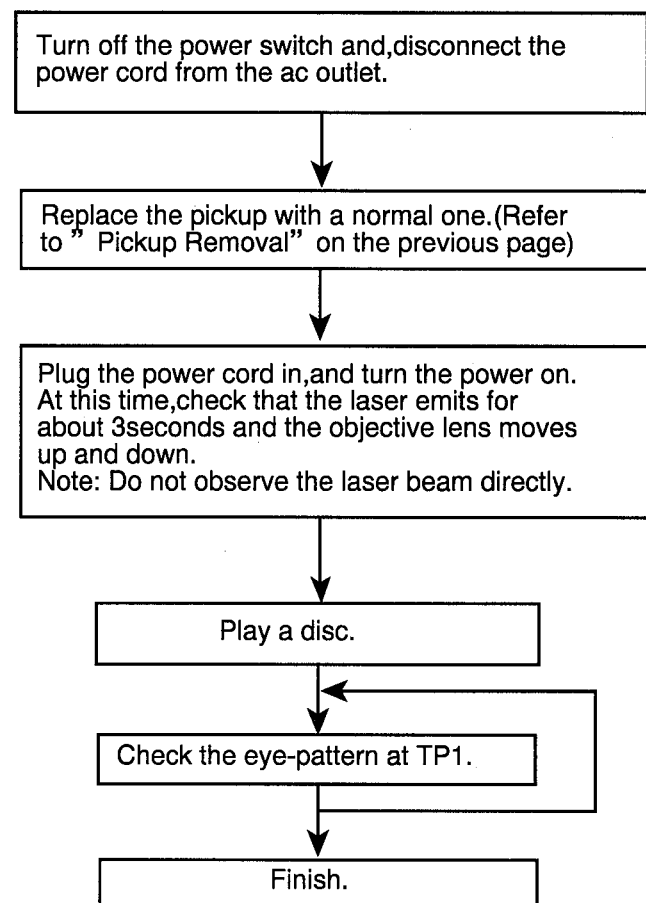
- (1) Cleaning the pick up lens
Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.
- (2) Life of the laser diode (Fig.1)
When the life of the laser diode has expired, the following symptoms will appear.
 - (1) The level of RF output (EFM output: amplitude of eye pattern) will below.



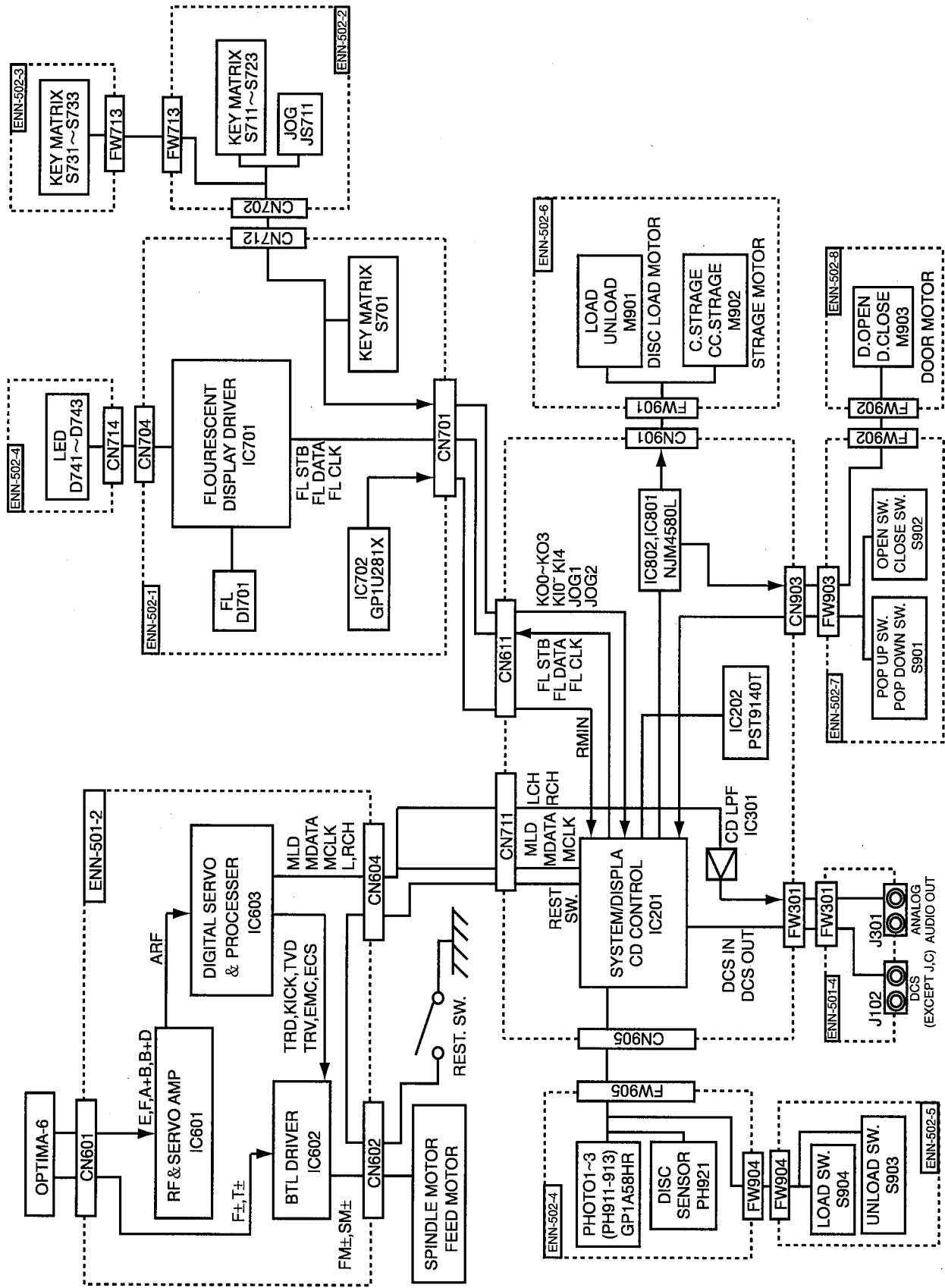
(Fig.1)

- (3) Semi-fixed resistor on the APC PC board
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
If the laser power is lower than the specified value, the laser diode is almost worn out, and the laser pickup should be replaced.
If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

Replacement of Laser Pickup



■ Block Diagram



Schematic Diagrams

7

6

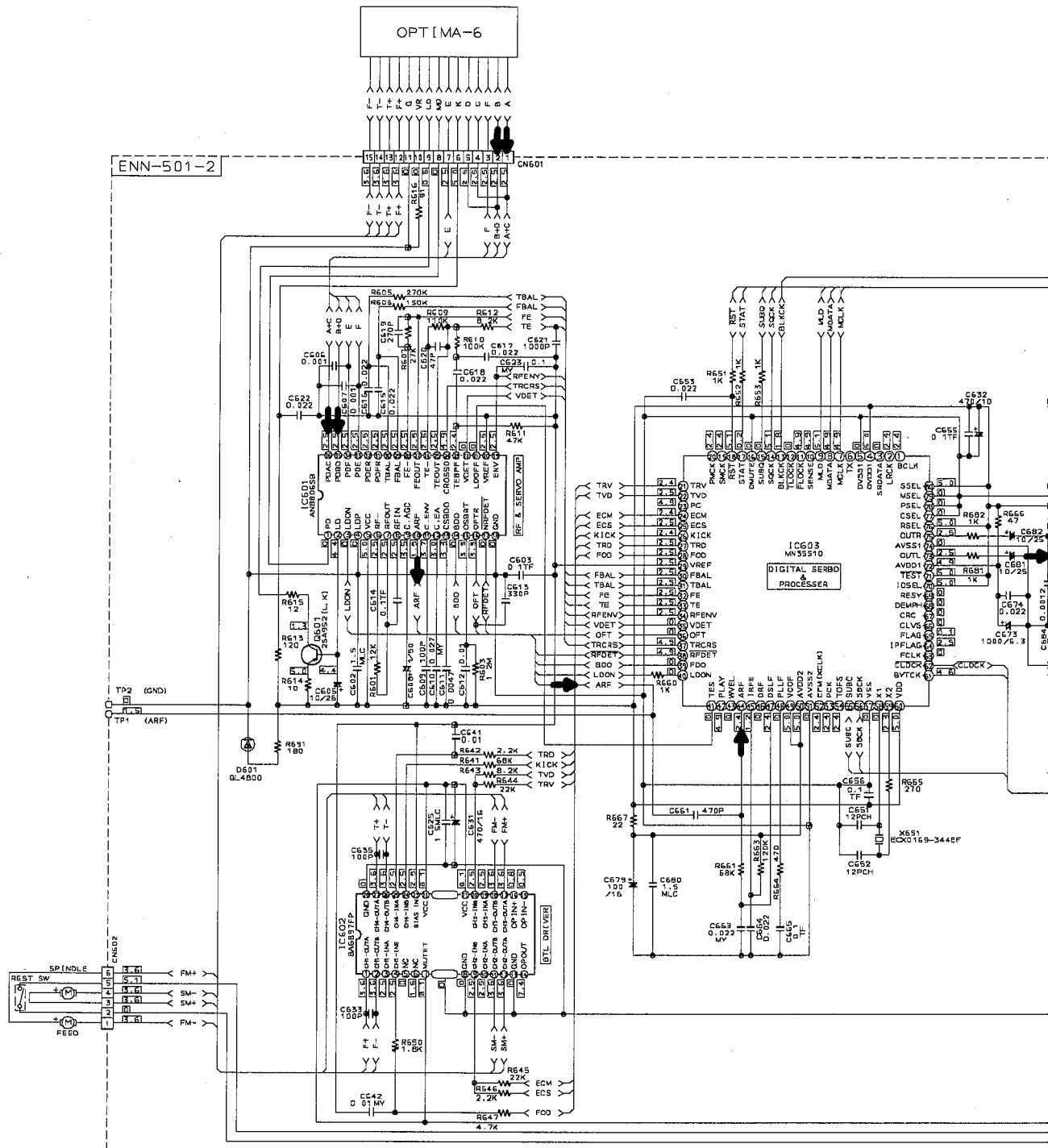
5

4

3

2

1



A

B

C

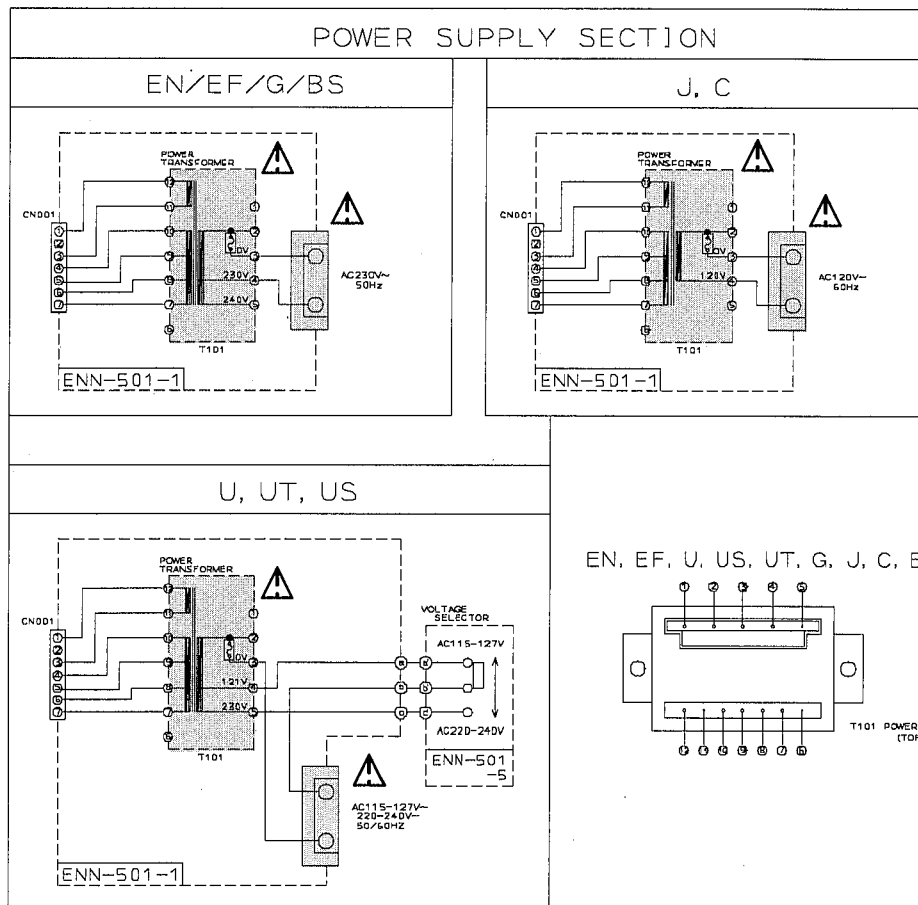
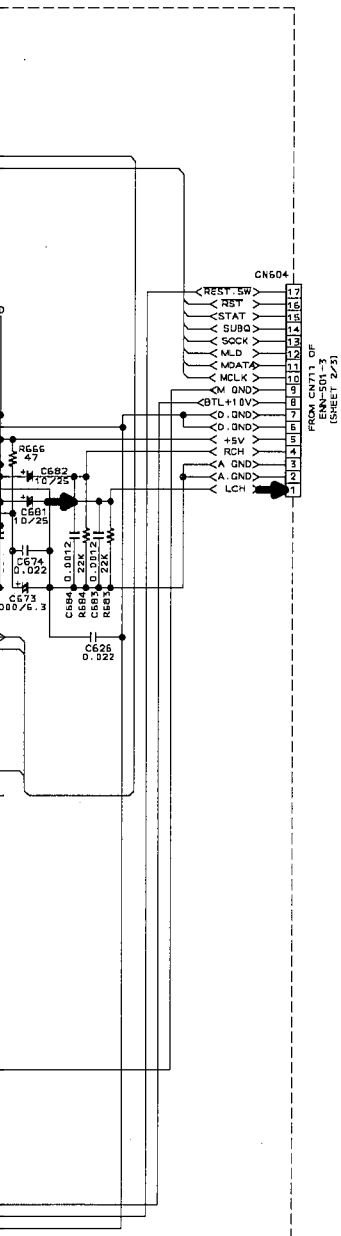
D

E

How to Schematic Diagrams

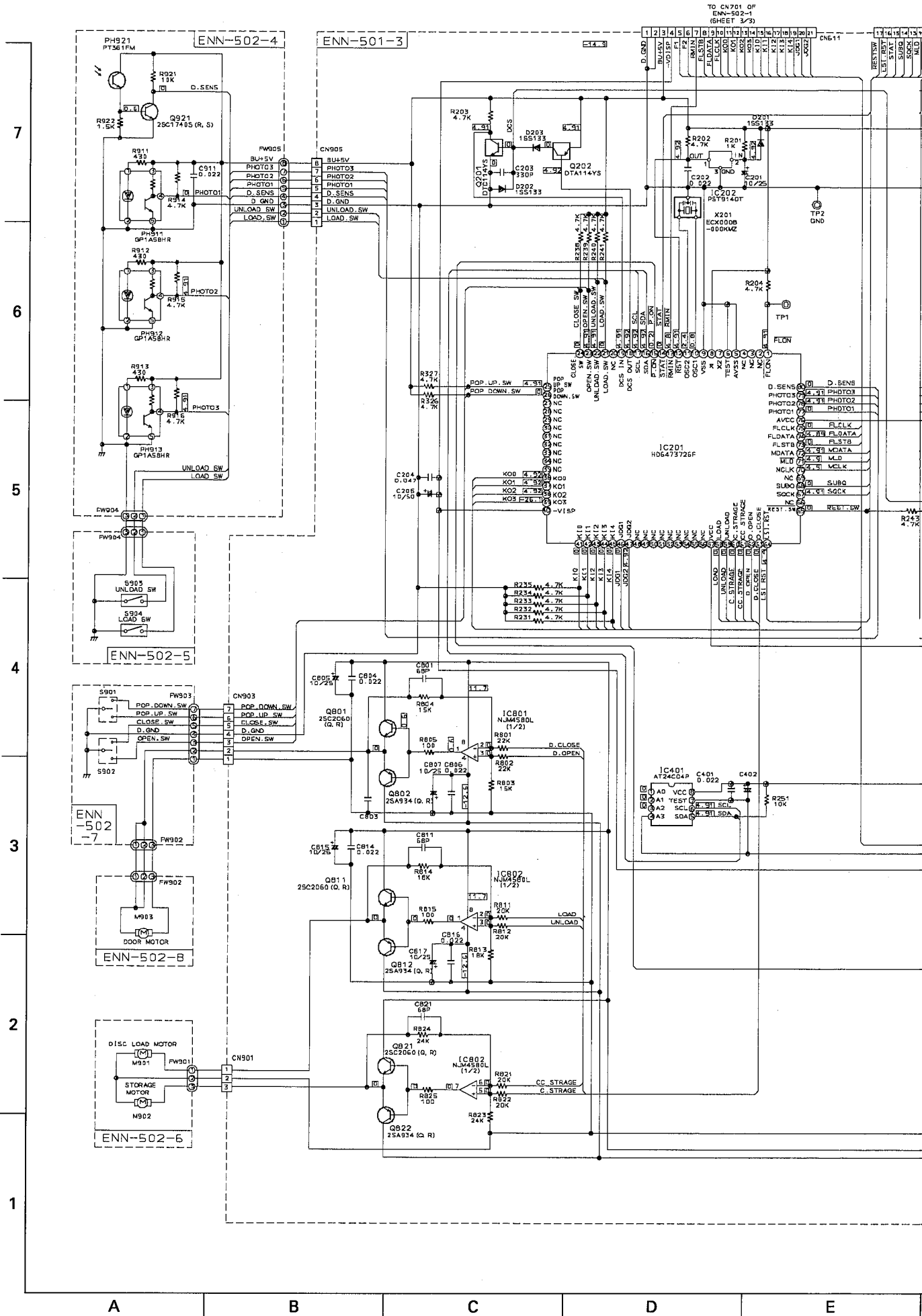
1. ➡ indicates signal path.
2. Parts marked with ⚠ and those in the shaded area are parts for safety.

Be sure to use one with the specified part number.



VERSION CODES

J : U.S.A.
 C : CANADA
 EN : NORDIC COUNTRIES
 EF : CONTINENTAL EUROPE EXCEPT GERMANY
 BS : U.K.
 G : GERMANY
 US : SINGAPORE
 UT : TAIWAN
 U : UNIVERSAL EXCEPT ALL OF ABOVE

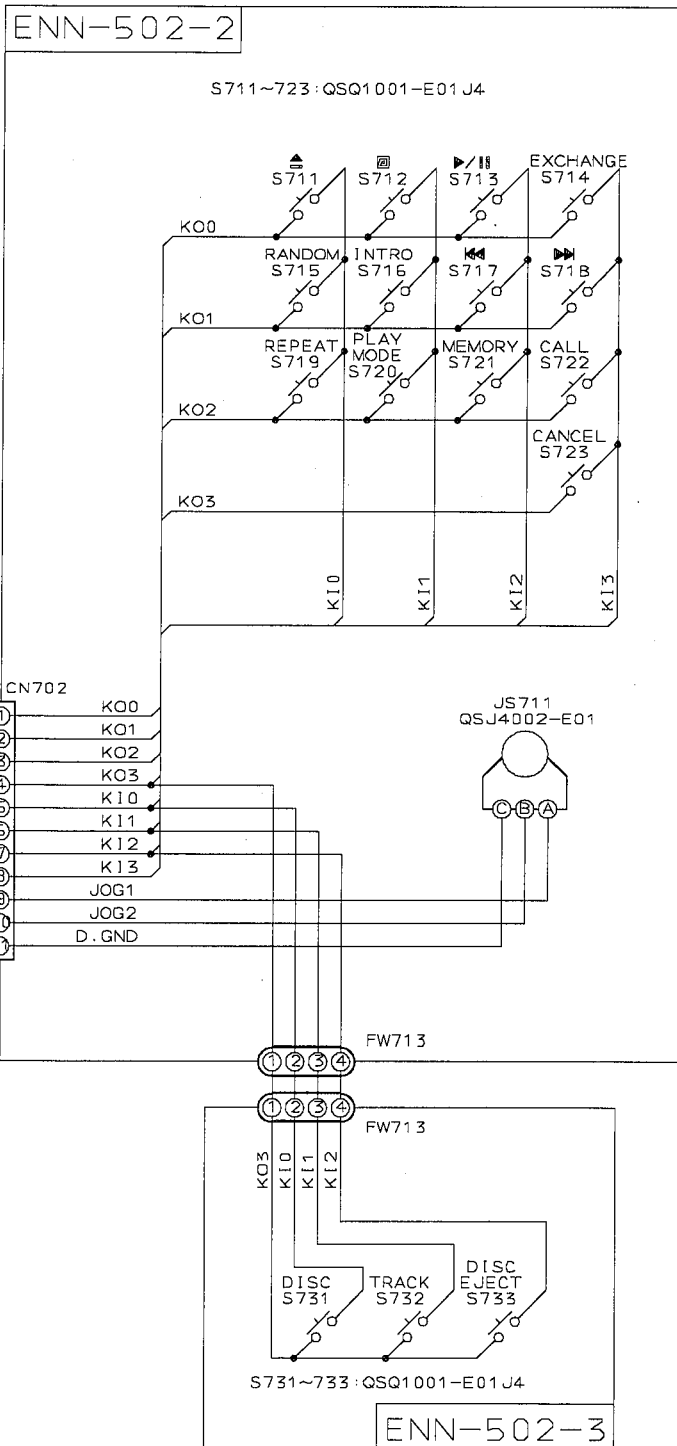




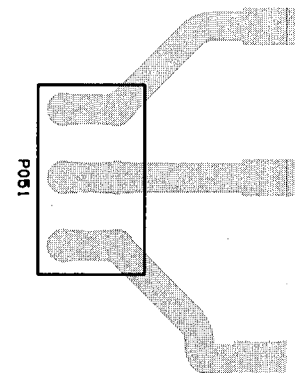
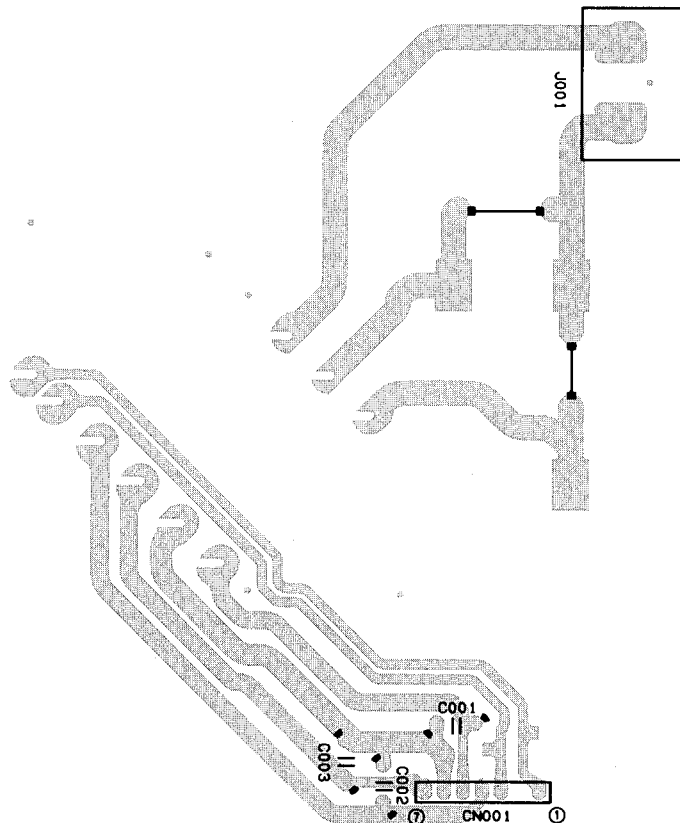
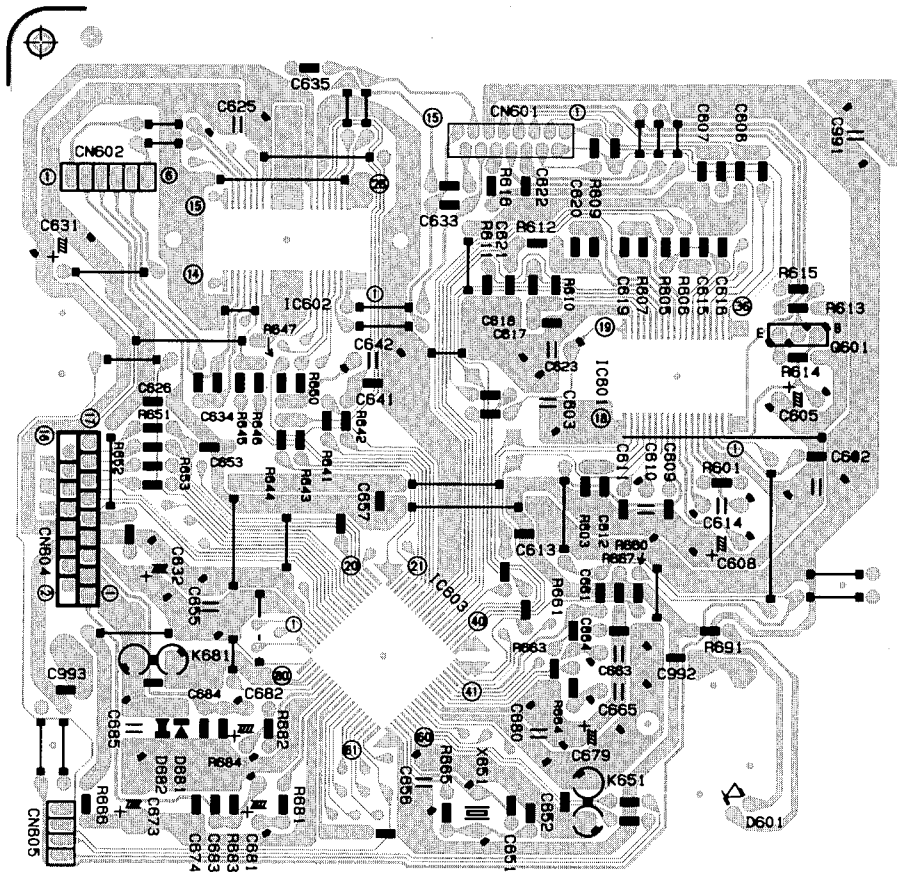
ENN-502-1

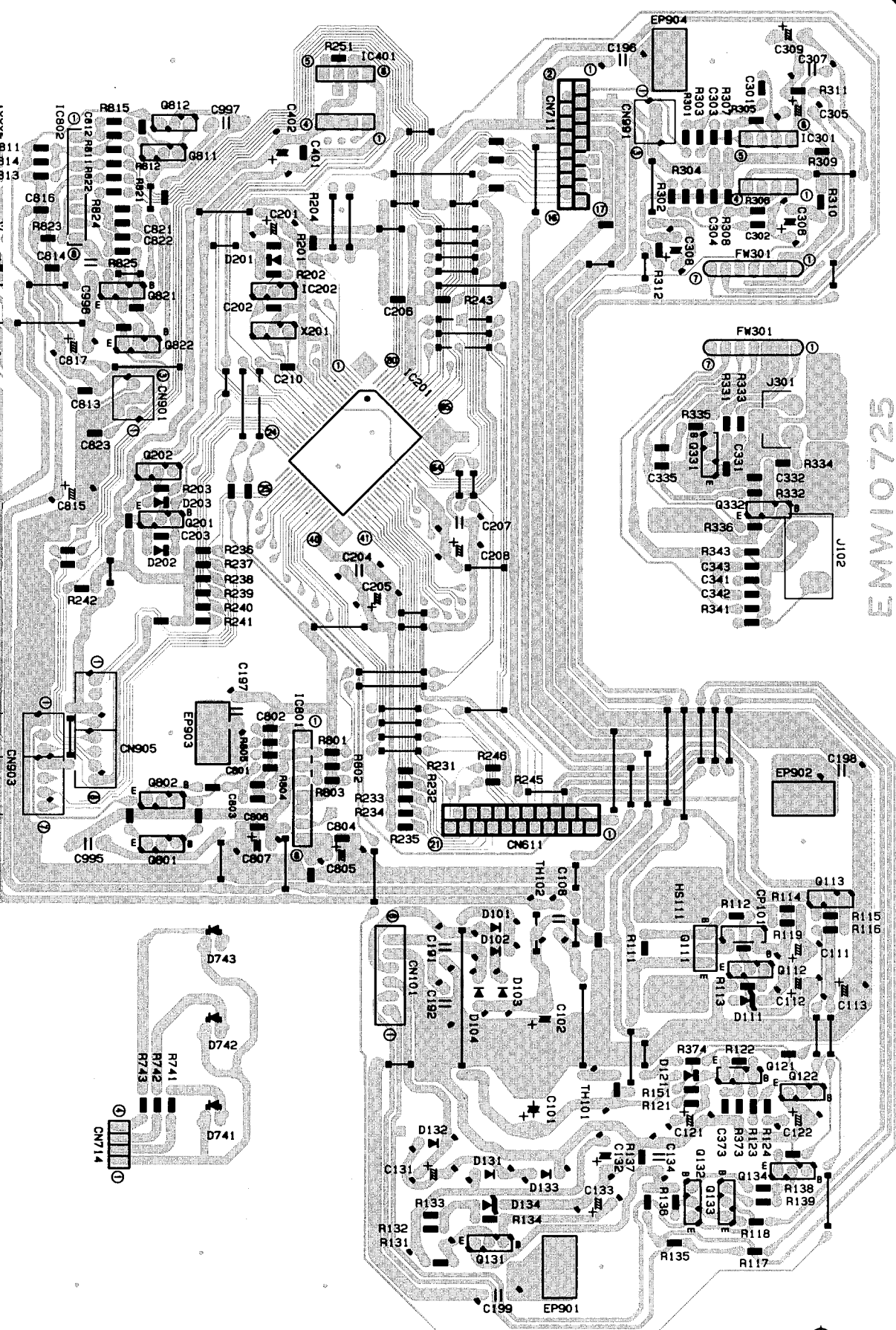
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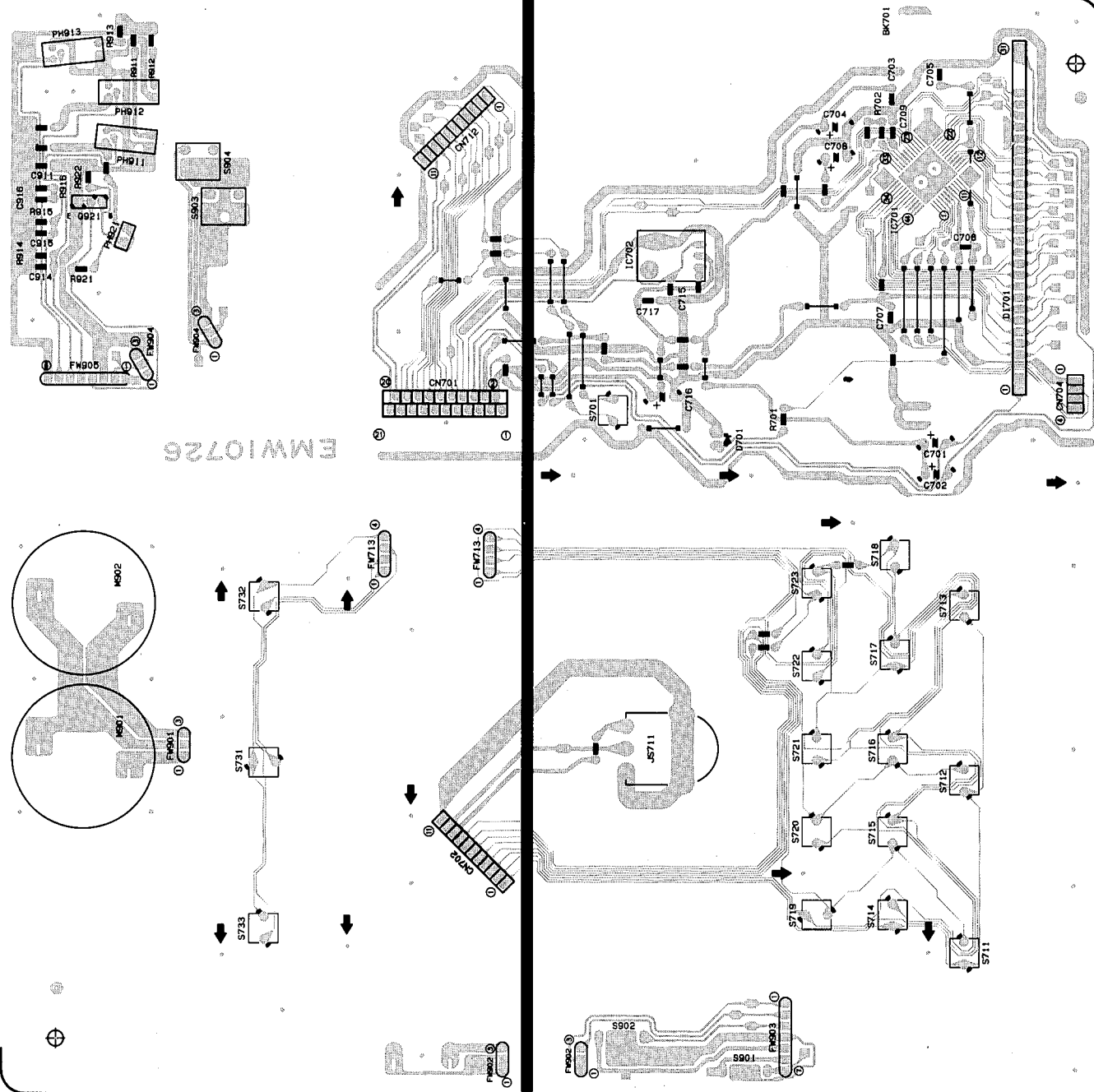
	EN, EF, U, US, UT, G, J, C	BS
D701	SLR-342VCA47	SLA-380LTA47



Printed Circuit Boards







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PARTS LIST

[XL-MC222BK]

All printed circuit board and its assemblies are not available as service parts.

The Marks for Designated Areas

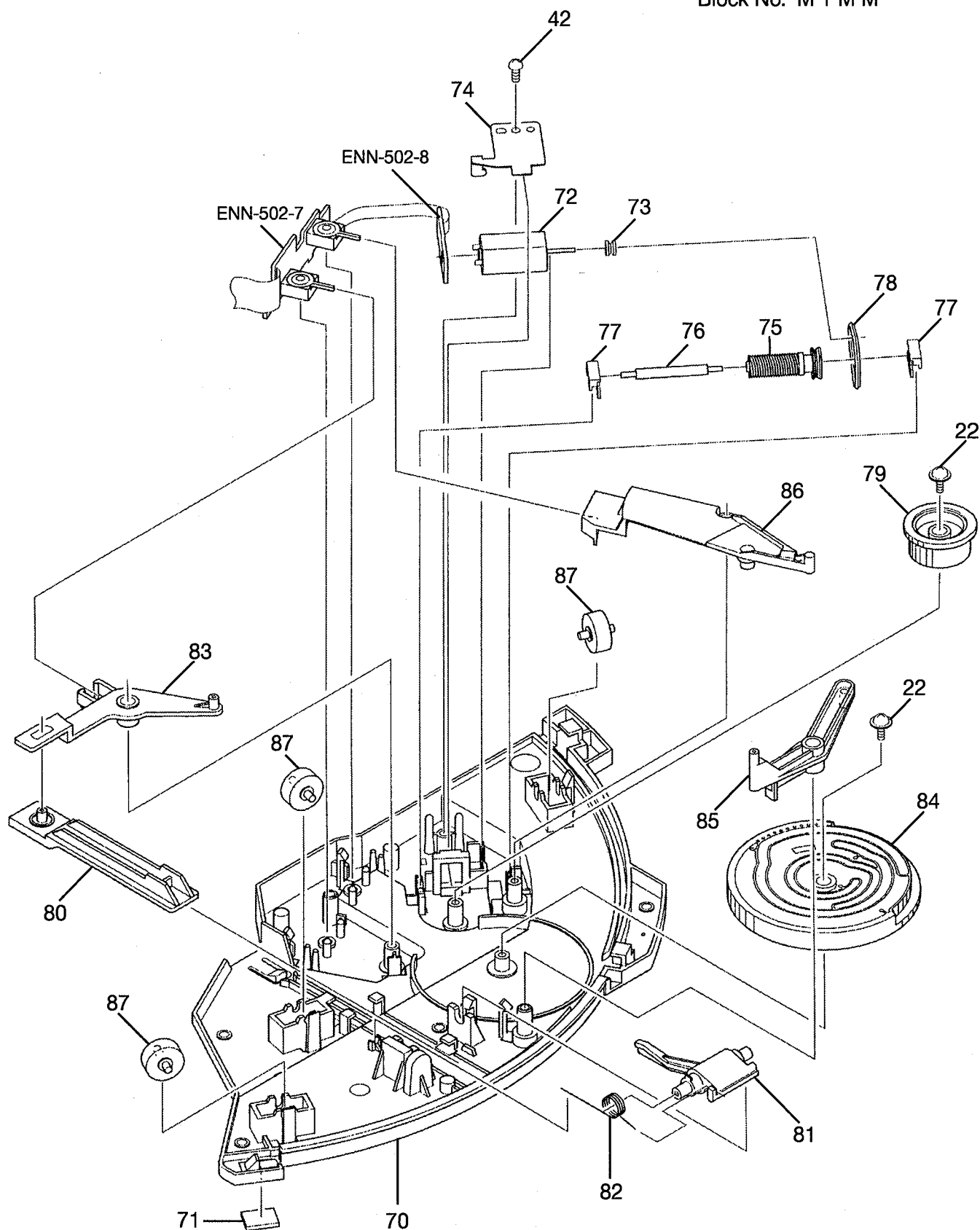
Bs		the U.K
C		Canada
J		the U.S.A
EF		Continental Europe
EN		Scandinavia
G		Germany
U		Universal Type
US		Singapore
UT		Taiwan

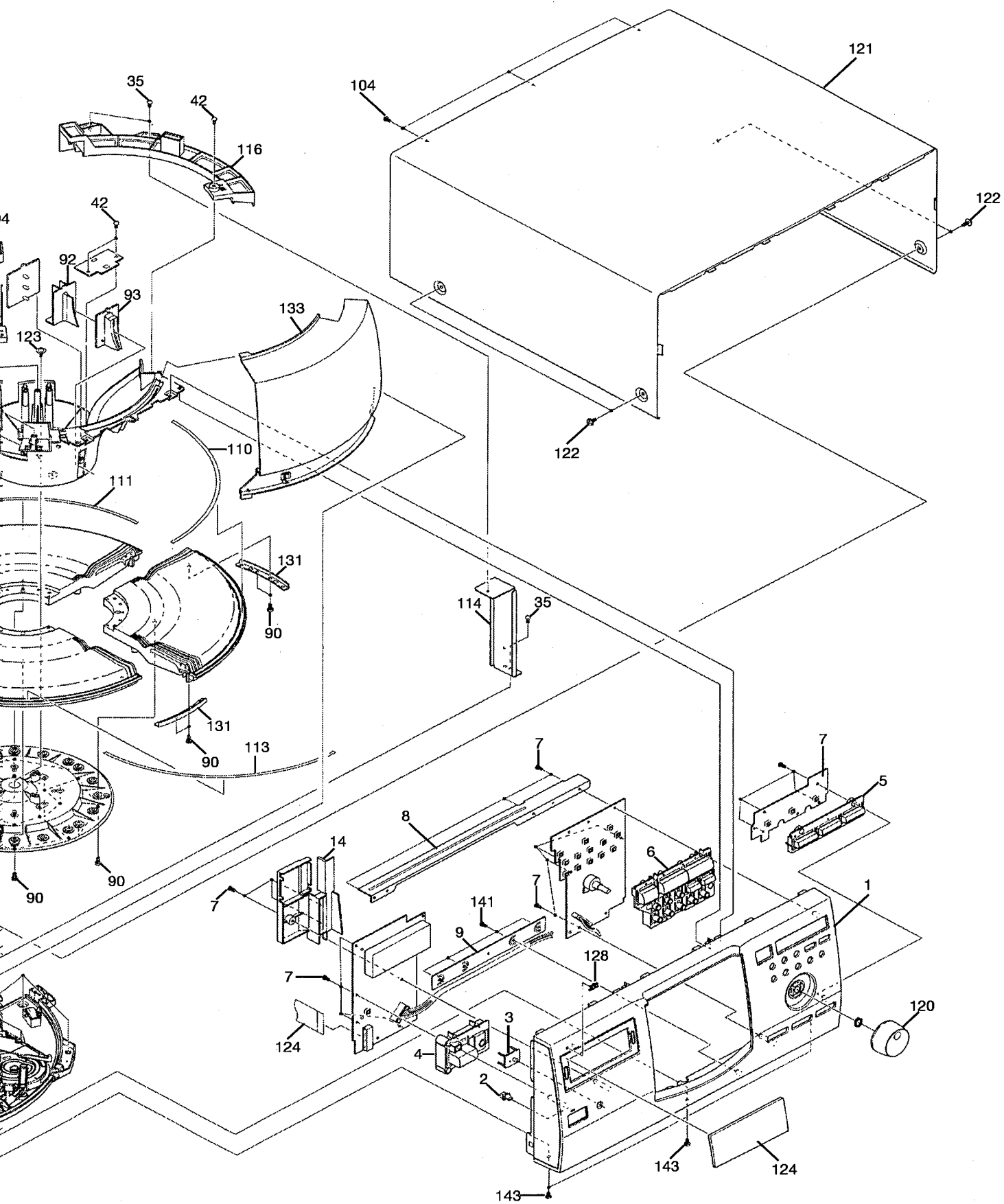
-- Contents --

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Grease Point	3-9
Electrical Parts List	3-13
System / CD control	3-13
CD/Changer control	3-15
Accessories List	3-16
Packing Materials and Parts List	3-17

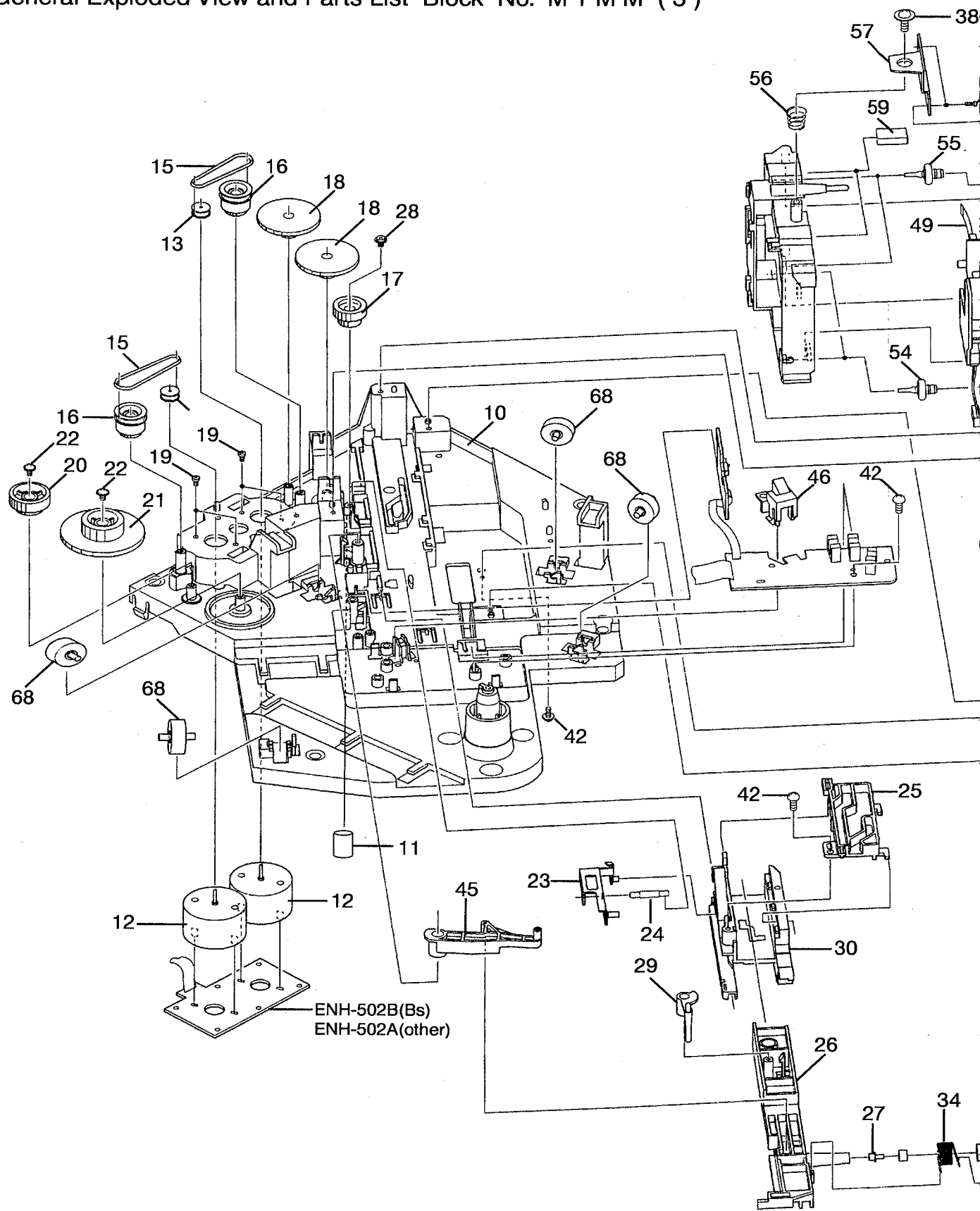
General Exploded View and Parts List (1)

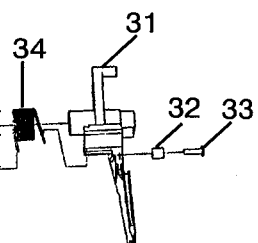
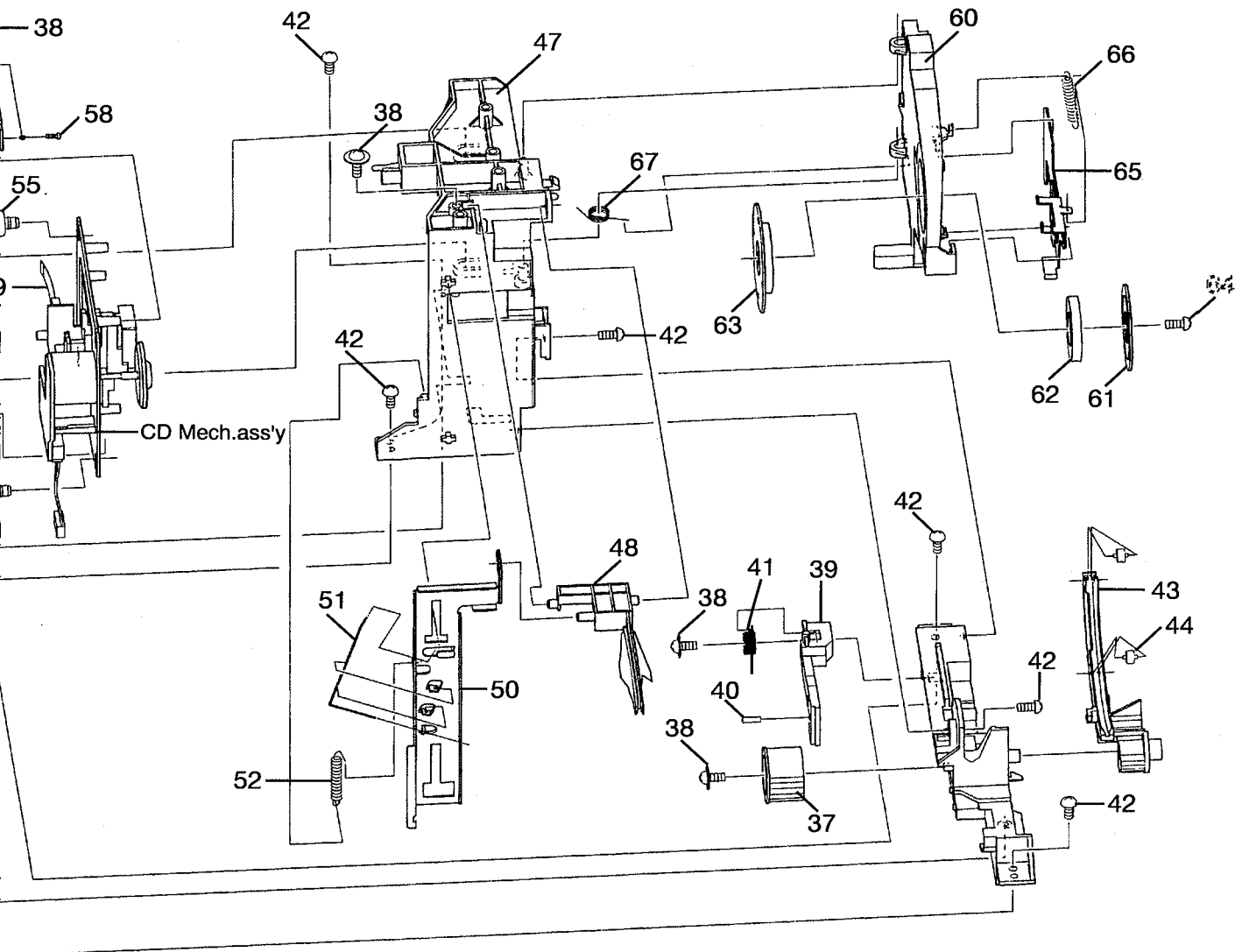
Block No. M 1 M M





General Exploded View and Parts List Block No. M 1 M M (3)





■ Parts List

Block No. **M1MM**

△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	1	LE10123-003A	FRONT PANEL	1		C J
	1	LE10123-004A	FRONT PANEL	1		BS EF EN G U US UT
	2	E409509-001	INDICATOR LENS	1		
	3	E308744-002	REMOTE LENS	1		
	4	LE30481-001A	POWER BUTTON	1		C J
	4	LE30481-002A	POWER BUTTON	1		BS EF EN G U US UT
	5	LE20267-001A	OPERATION BUTTON	1		
	6	LE20269-001A	PLAY BUTTON	1		
	7	SDSF2608Z	SCREW	20		
	8	LE20271-001A	FRONT BRACKET	1		
	9	LE30489-001A	WIRE COVER	1		
	10	LE10094-001A	MECHA BASE	1		
	11	LE40177-002A	GUIDE PIN	1		
	12	RF-500TB-14415	DC MOTOR	2		
	13	E75984-222SS	MOTOR PULLEY	2		
	14	LE30486-001A	P.W. BOARD COVER	1		
	15	E75950-002	REEL BELT	2		
	16	E409142-001	LOADING GEAR	2		
	17	LE40151-001A	DRIVE GEAR	1		
	18	LE40152-001A	DRIVE GEAR	2		
	19	SPSP2604Z	SCREW	4		
	20	LE40161-001A	DRIVE GEAR	1		
	21	LE40162-001A	DRIVE GEAR	1		
	22	GBSF3008Z	TAPPING SCREW	12		
	23	LE40248-001A	U. LINK LEVER ASSY	1		
	24	LE40239-001A	LEVER SHAFT	1		
	25	LE30424-001A	CAM COVER	1		
	26	LE30393-001A	LOADING GUIDE	1		
	27	LE40257-001A	GUIDE STUD	1		
	28	E72405-001	SPECIAL SCREW	1		
	29	LE40150-001A	LOCK LEVER	1		
	30	LE20154-001A	LOADING CAM	1		
	31	LE30394-001A	LOADING LEVER	1		
	32	LE40254-001A	LOADING ROLLER	1		
	33	LE40258-002A	LEVER STUD	1		
	34	LE40183-001A	TORSION SPRING	1		
	35	SBSG3008N	TAPPING SCREW	15		
	36	LE10095-001A	LEVER BASE	1		
	37	LE40153-001A	DRIVE GEAR	1		
	38	E65923-003	TAPPING SCREW	4		
	39	LE30396-001A	TAKE-UP LEVER	1		
	40	LE40177-001A	LEVER PIN	1		
	41	LE40183-005A	TORSION SPRING	1		
	42	SBSF3008Z	TAPPING SCREW	21		
	43	LE20211-001A	TAKE-UP LEVER	1		
	44	LE40154-001A	TAKE-UP ROLLER	2		
	45	LE40155-001A	LOCK LEVER	1		
	46	LE30491-001A	L. E. D. HOLDER	1		
	47	LE10093-001A	LOADING BASE	1		
	48	LE30448-001A	UPPER LEVER	1		
	49	VWF1015-07TTAX	FLAT WIRE	1		
	50	LE30449-001A	UPPER PLATE	1		
	51	LE40157-001A	ROD	1		
	52	LE40180-004A	TENSION SPRING	1		
	53	LE20153-001A	LOADING BASE	1		
	54	E406294-001	INSULATOR	2		

■ Parts List

Block No. **M T M M**

△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	55	E406294-002	INSULATOR	2		
	56	LE40179-001A	TAKE-UP SPRING	1		
	57	LE40149-001A	GUIDE BRACKET	1		
	58	SBSF2006Z	TAPPING SCREW	2		
	59	LE30001-020A	SPACER	2		
	60	LE20155-001A	CLAMPER BASE	1		
	61	VKL7757-001	YOKE PLATE	1		
	62	VYH7313-005	MAGNET	1		
	63	VKS3697-001	CD CLAMPER	1		
	64	SBSF2606Z	TAPPING SCREW	1		
	65	LE40165-001A	CLAMPER LEVER	1		
	66	LE40180-002A	TENSION SPRING	1		
	67	LE40183-004A	TORSION SPRING	1		
	68	LE40171-001A	MECHA ROLLER	5		
	69	SBST3010Z	TAPPING SCREW	6		
	70	LE10100-001A	DOOR BASE	1		
	71	LE30001-018A	SPACER	1		
	72	PPN13KA11C	DC MOTOR	1		
	73	LE40160-001A	MOTOR PULLEY	1		
	74	LE40163-001A	MOTOR BRACKET	1		
	75	E408199-001SS	WORM PULLEY	1		
	76	LE40178-001A	SHAFT PIN	1		
	77	LE40288-001A	GUIDE SHAFT	2		
	78	E75950-003	DRIVE BELT	1		
	79	LE40164-001A	DRIVE GEAR	1		
	80	LE30401-001A	SLIDE CAM	1		
	81	LE30402-001A	TAKE-UP LEVER	1		
	82	LE40183-003A	TORSION SPRING	1		
	83	LE30403-001A	TAKE-UP LEVER	1		
	84	LE20156-001A	MAIN GEAR	1		
	85	LE30404-001A	LOCK LEVER	1		
	86	LE30405-001A	STOP LEVER	1		
	87	LE40171-001A	MECHA ROLLER	3		
	88	LE10097-001A	CENTER PULLEY	1		
	89	LE10096-001A	CENTER CASE	4		
	90	QYDSFY3008Z	TAPPING SCREW	32		
	91	LE10098-001A	CENTER COVER	1		
	92	LE30487-001A	INDICATOR PLATE	1		
	93	LE30488-001A	INDICATOR PLATE	1		
	94	LE20182-001A	LOADING GUIDE	1		
	95	LE20285-001A	SIDE BRACKET	1		
	96	LE40315-001A	GUIDE BRACKET	1		
	97	LE30492-001A	L. E. D. HOLDER	1		
	98	E65389-004	SPECIAL SCREW	2		
	99	VWF1217-10TTB	FLAT WIRE	1		
	100	LE10127-001A	CHASSIS BASE	1		
	101	LE10130-005A	REAR PANEL	1		J
	101	LE10130-006A	REAR PANEL	1		C
	101	LE10130-007A	REAR PANEL	1		BS EF EN G
	101	LE10130-008A	REAR PANEL	1		U US UT
	102	LE30001-021A	SPACER	2		
	103	E68587-006	BRACKET	5		
	104	E73273-006	SPECIAL SCREW	18		
	105	LE30521-001A	REAR COVER	1		
	106	LE10132-001A	TRANSFORMER BRACKET	1		
	107	E310243-002	PLASTIC RIVET	2		

■ Parts List

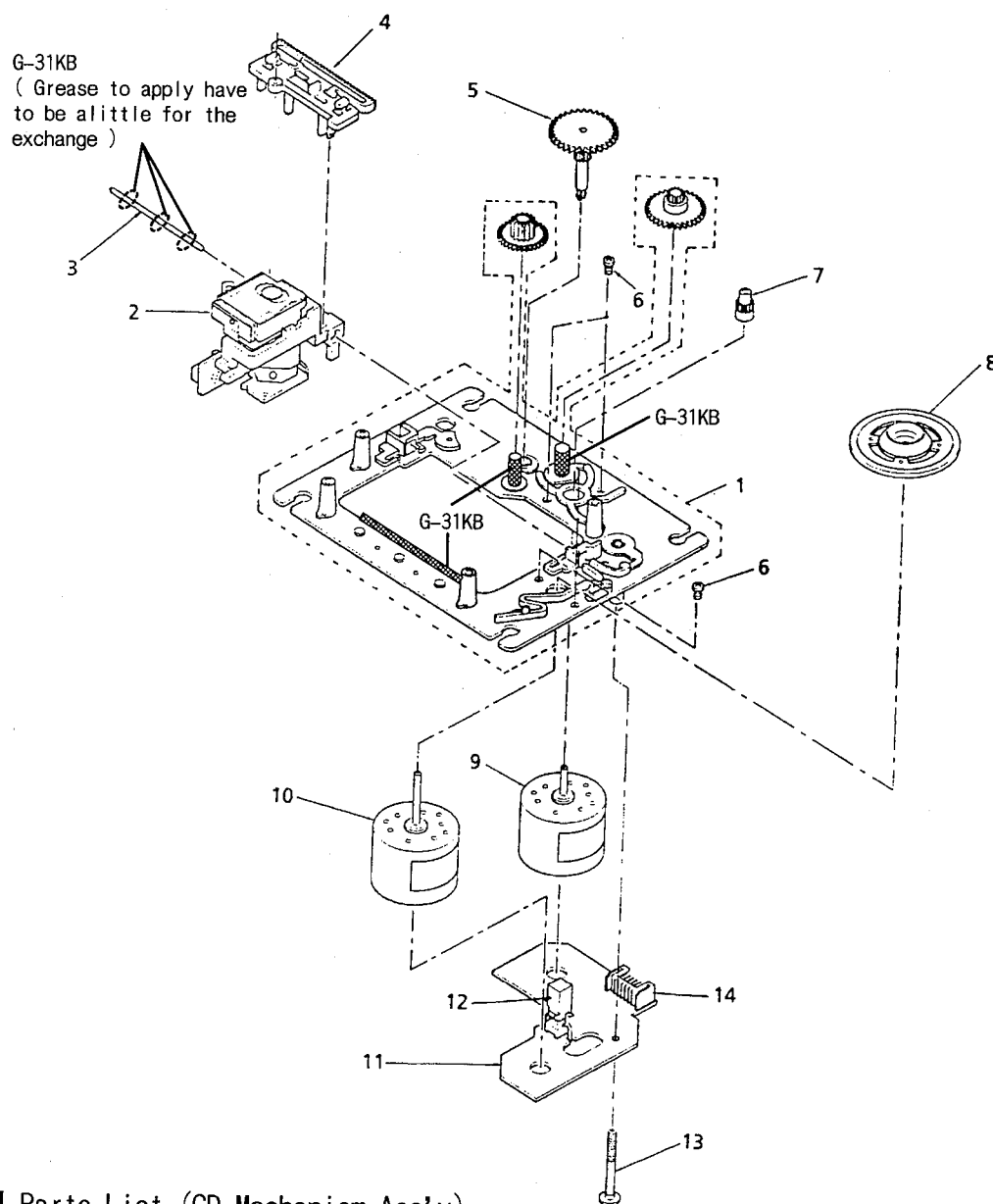
Block No. **M1M1**

△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	108	LE30520-001A	WIRE CLAMP	1		
	109	SBST3004CC	TAPPING SCREW	2		
	110	LE30399-001A	DISC NUMBERLABEL	1	1-50	
	111	LE30399-002A	DISC NUMBERLABEL	1	51-100	
	112	LE30399-003A	DISC NUMBERLABEL	1	101-150	
	113	LE30399-004A	DISC NUMBERLABEL	1	151-200	
	114	LE30519-001A	SIDE BRACKET	2		
	115	LE20183-001A	FRAME ANGLE	1	L	
	116	LE20184-001A	FRAME ANGLE	1	R	
△	117	ETP1000-77EAJ	POWER TRANSFORMER	1		BS EF EN G
△	117	ETP1000-77JAJ	POWER TRANSFORMER	1		C J
△	117	ETP1000-77LAJ	POWER TRANSFORMER	1		U US UT
	118	E47227-042	FOOT ASSY	1	SENER	
	119	E307427-005	FOOT ASSY	4		
	119	E307427-005	FOOT ASSY	2	FRONT SIDE	C J
	119	E47227-041	FOOT ASSY	2	REAR SIDE	C J
	120	LE30485-001A	MASTER KNOB	1		
	121	LE10128-001A	METAL COVER	1		
	122	E406308-003	SPECIAL SCREW	4		
	123	E65923-003	TAPPING SCREW	2		
	124	LE30483-001A	WINDOW SCREEN	1		
	125	VWF1221-62TTBV	FLAT WIRE	1		
	128	VJD5429-001	JVC MARK	1		
	130	LE40253-001A	LOADING ROLLER	1		
	131	LE40156-001A	CENTER BRACKET	4		
	132	EWS266-B420	SOCKET WIRE ASSY	1		
	133	LE10125-001A	GD DOOR	1		
	136	E307428-005	FOOT	1		
	137	E75145-001	CUSHION	1		
	140	SBST3006Z	TAPPING SCREW	5		
	142	SDSF3008M	TAPPING SCREW	1		
	143	SDSF2606M	TAPPING SCREW	9		
	144	SBSF2608M	TAPPING SCREW	2		U US UT

CD Mechanism Ass'y and Parts List

■ Grease Point

Block No. **M2MM**



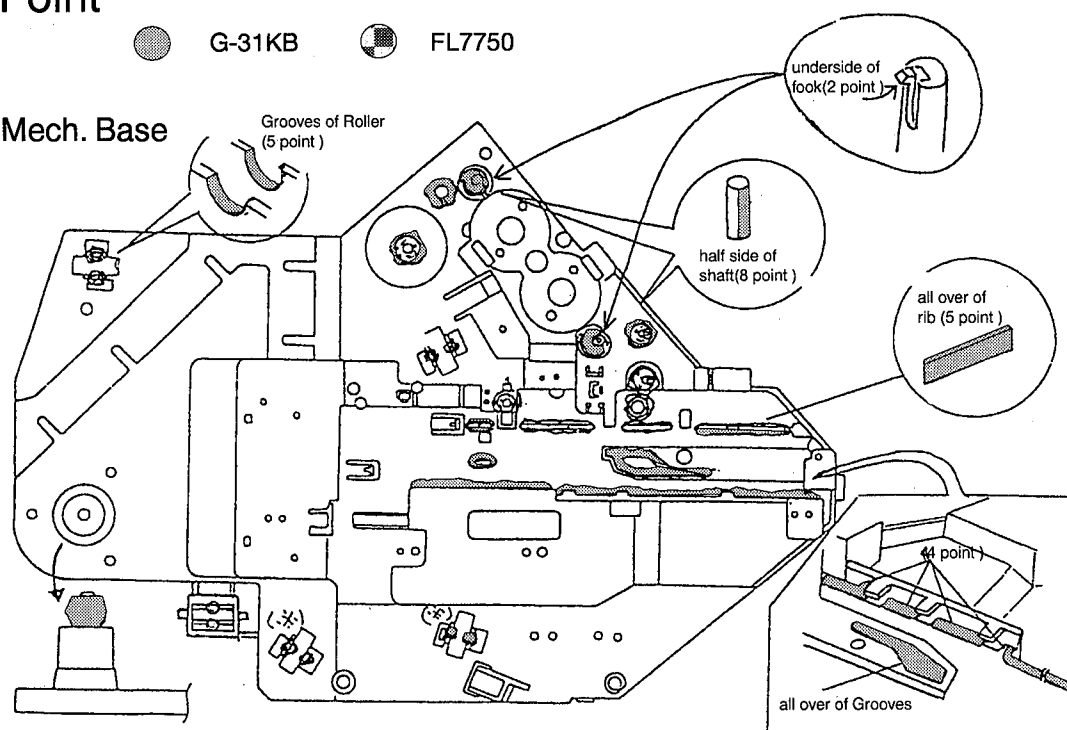
■ Parts List (CD Mechanism Ass'y)

△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	1	EPB-002A	MECHA. BASE ASSY	1		
	2	OPTIMA-150S	OPTICAL PICK UP	1		
	3	E406777-001	CD SHAFT	1		
	4	E307746-001	CD RACK	1		
	5	E307745-221SS	MECHA GEAR	1		
	6	SDSP2003N	SCREW	3		
	7	E406750-001	PINION GEAR	1		
	8	HQ300014-001	TURN TABLE	1		
	9	E406784-001	FEED MOTOR	1		
	10	E406783-001	SPINDLE MOTOR	1		
	11	EMW10190-001(S)	P.C. BOARD	1		
	12	ESB1100-005	LEAF SWITCH	1		
	13	E75832-001	SCREW	1		
	14	EMV5109-006B	CONN. TERMINAL	1	6PIN	
	15	SDSF2006Z	SCREW	1		

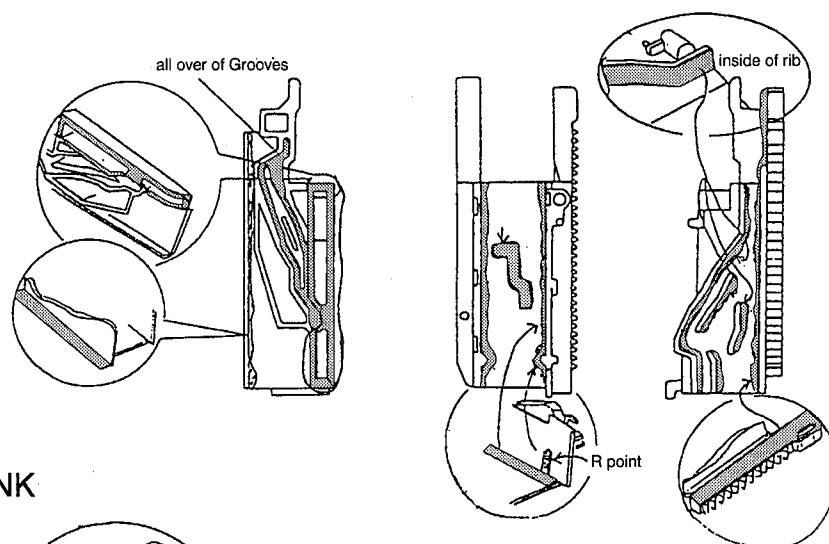
Grease Point

● G-31KB ● FL7750

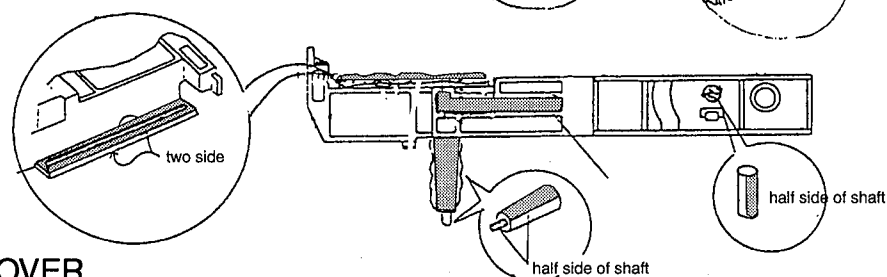
1. Mech. Base



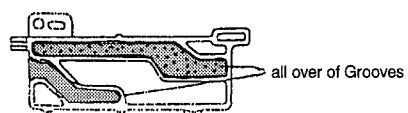
2. CAM



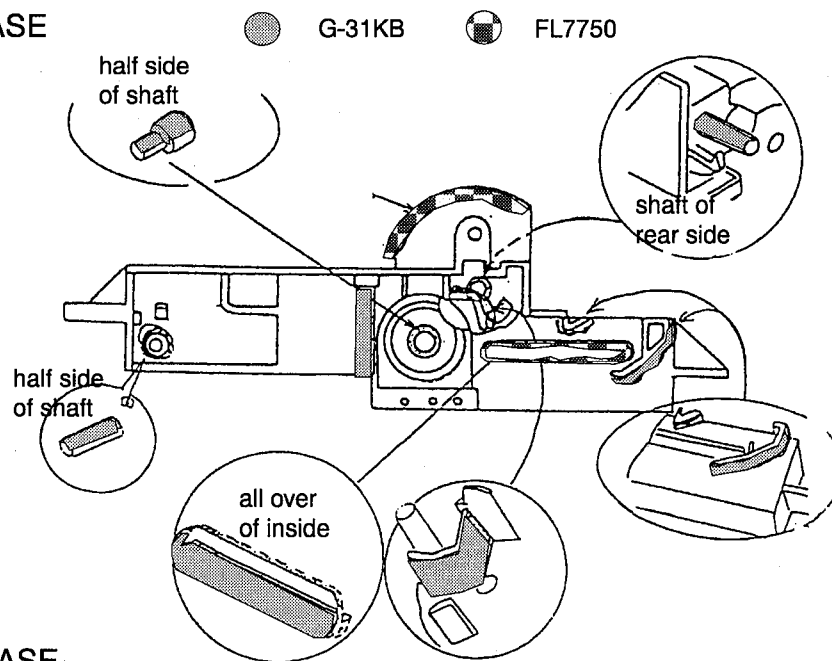
3. LOAD LINK



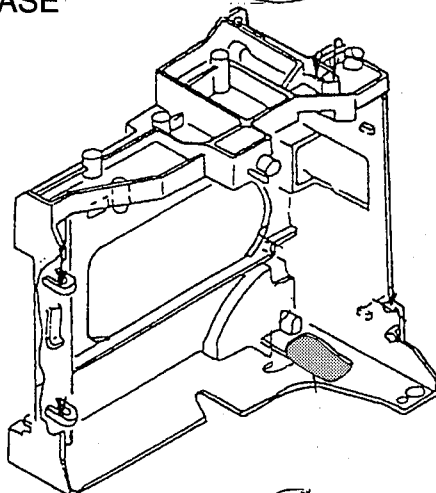
4. CAM COVER



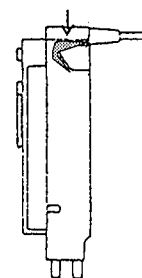
5. LEVER BASE



6. LADING BASE

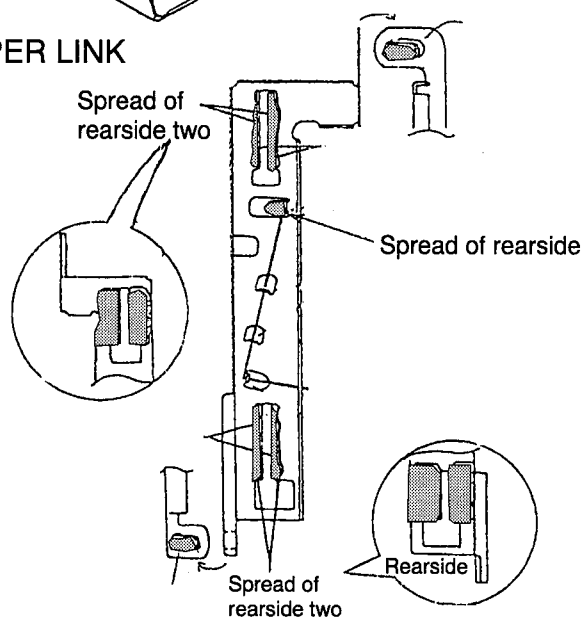


7. PU BASE



side view

8. UPPER LINK



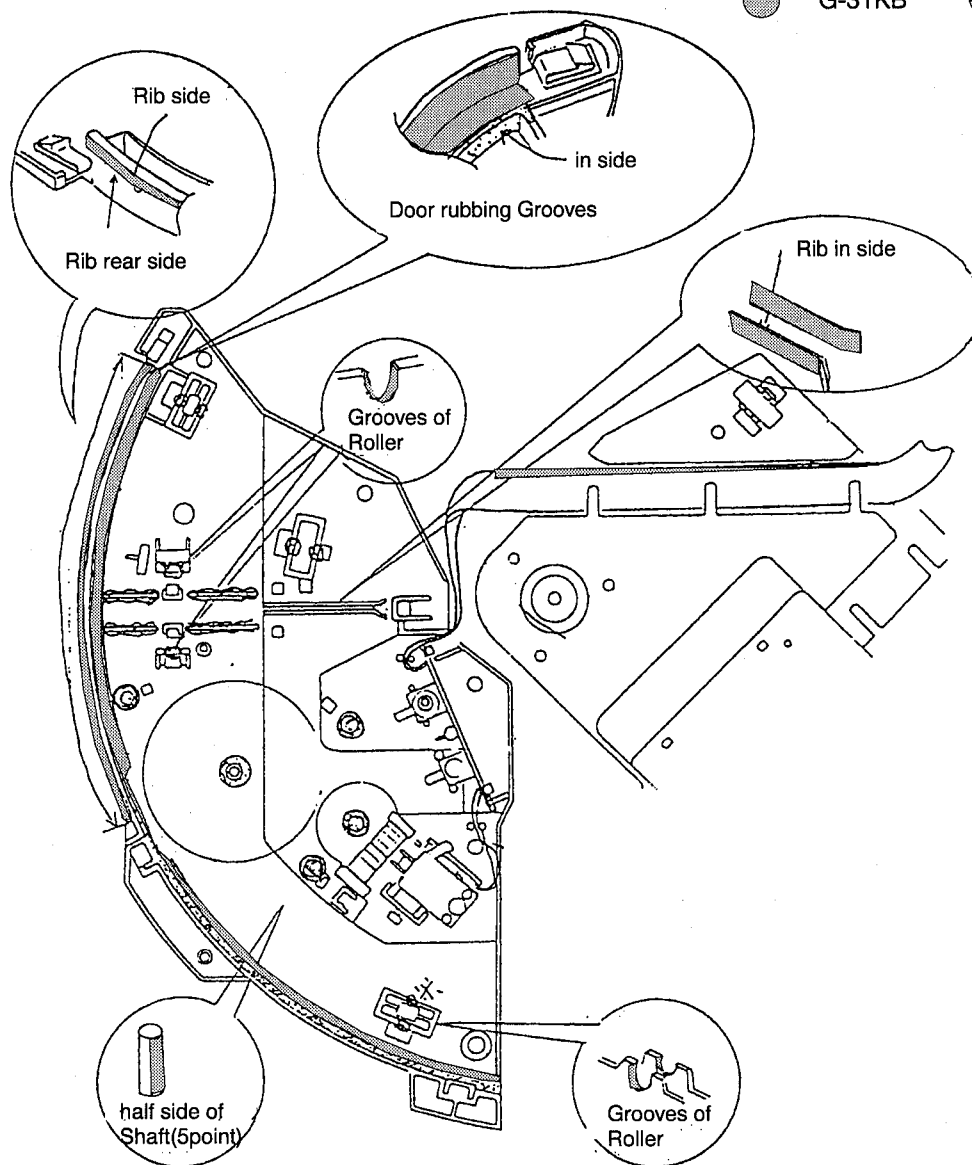
9. Door base



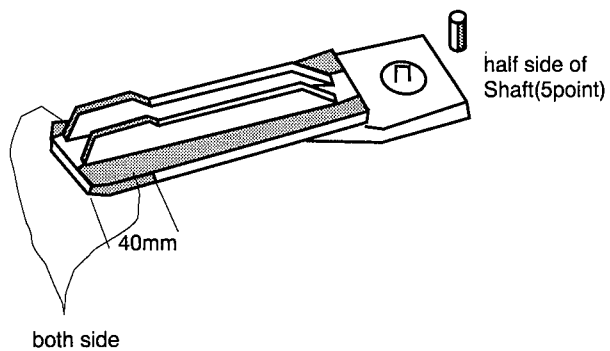
G-31KB



FL7750

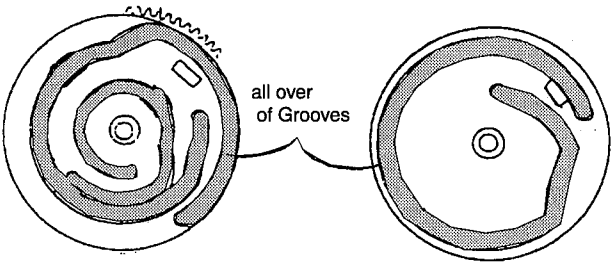


10. Slide Cam

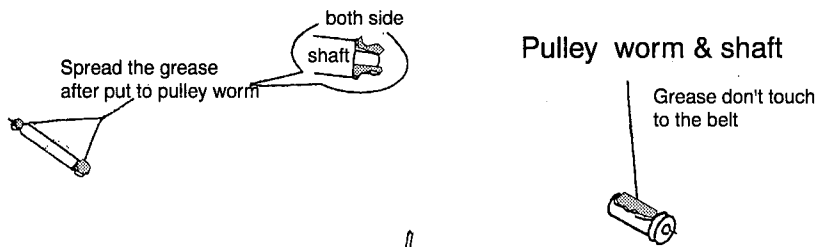


11. Main Gear

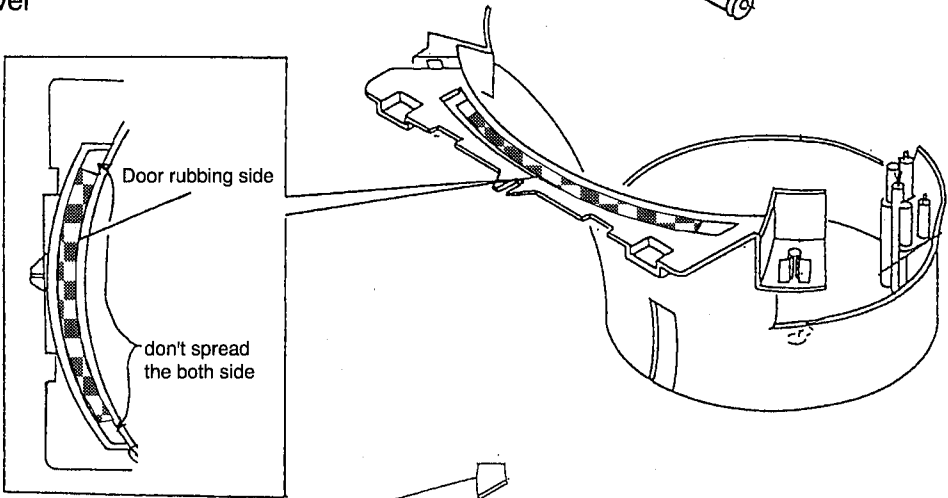
● G-31KB ● FL7750



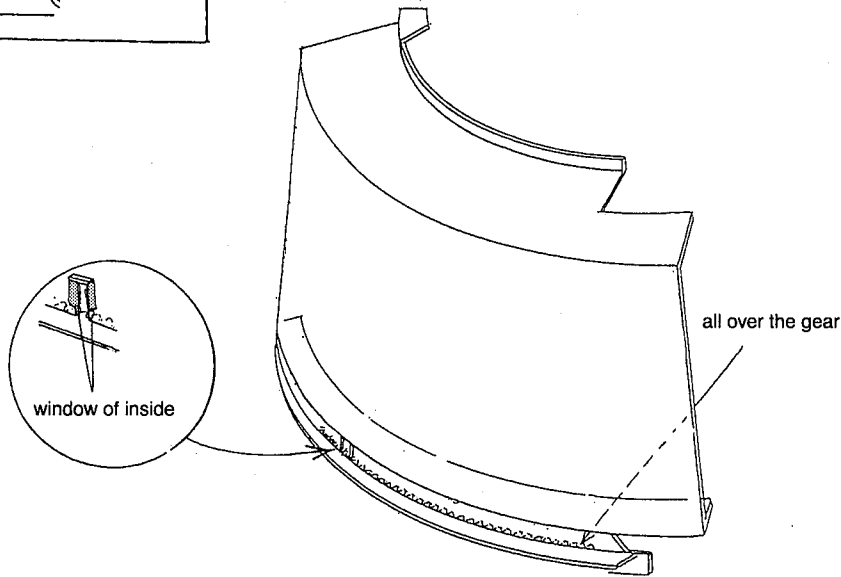
12. Pulley worm & shaft



13. Safety cover



14. Door



Electrical Parts List (System / CD control PCB)

△	Item	Parts Number	Description	Area
		I. C. S		
	IC201	HD6433726SD56F	I. C.	
	IC202	PST9140T	I. C (MONO-ANALOG)	
	IC301	NJM4580DD	I. C (MONO-ANALOG)	
	IC401	AT24C04-10PC	I. C (EP-ROM)	
	IC601	AN8806SB	I. C (MONO-ANALOG)	
	IC602	BA6897FPW	I. C (MONO-ANALOG)	
	IC603	MN35510	I. C (DIGI-MOS)	
	IC801	NJM4580L	I. C (MONO-ANALOG)	
	IC802	NJM4580L	I. C (MONO-ANALOG)	
		DIODES		
	D101	1SR35-200A	SI. DIODE	
	D102	1SR35-200A	SI. DIODE	
	D103	1SR35-200A	SI. DIODE	
	D104	1SR35-200A	SI. DIODE	
	D111	MTZ5.6JA	ZENER DIODE	
	D121	1SS133	SI. DIODE	
	D131	1SR35-200A	SI. DIODE	
	D132	1SR35-200A	SI. DIODE	
	D133	1SR35-200A	SI. DIODE	
	D134	MTZ30JC	ZENER DIODE	
	D201	1SS133	SI. DIODE	
	D202	1SS133	SI. DIODE	
	D203	1SS133	SI. DIODE	
	D601	GL4800BC	L. E. D.	
	D741	SLA-362LTA47	L. E. D.	
	D742	SLA-362LTA47	L. E. D.	
	D743	SLA-362LTA47	L. E. D.	
		TRANSISTORS		
	Q111	2SB1655 (E)	SILICON	
	Q112	2SD1302	SI. TRANSISTOR	
	Q113	2SB1357 (E, F)	SI. TRANSISTOR	
	Q121	2SA933S (RS)	SI. TRANSISTOR	
	Q122	DT0114YS	DIGITAL TRANSISTOR	
	Q131	2SA933S (RS)	SI. TRANSISTOR	
	Q132	2SD1302	SI. TRANSISTOR	
	Q133	2SD1302	SI. TRANSISTOR	
	Q134	DTA114YS	DIGITAL TRANSISTOR	
	Q201	DT0114ES	DIGITAL TRANSISTOR	
	Q202	DTA114YS	DIGITAL TRANSISTOR	
	Q331	2SD1302	SI. TRANSISTOR	
	Q332	2SD1302	SI. TRANSISTOR	
	Q601	2SA952 (L, K)	SI. TRANSISTOR	
	Q801	2SC2060 (Q, R)	SI. TRANSISTOR	
	Q802	2SA934 (Q, R)	SI. TRANSISTOR	
	Q811	2SC2060 (Q, R)	SI. TRANSISTOR	
	Q812	2SA934 (Q, R)	SI. TRANSISTOR	
	Q821	2SC2060 (Q, R)	SI. TRANSISTOR	
	Q822	2SA934 (Q, R)	SI. TRANSISTOR	
		CAPACITORS		
	C101	QETB1CM-338M	3300MF 16V E. CAP.	
	C102	QETB1CM-228M	2200MF 16V E. CAP.	
	C108	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C111	QETB1HM-225	2.2MF 50V AL. E. CAP.	
	C112	QETC1AM-476ZM	47MF 10V E. CAP.	
	C113	QETC1AM-476ZM	47MF 10V E. CAP.	
	C121	QETC1CM-227Z	220MF 16V AL. E. CAP.	
	C122	QETB1CM-476	47MF 16V AL. E. CAP.	
	C131	QETB1EM-476	47MF 25V AL. E. CAP.	
	C132	QETB1HM-476	47MF 50V E. CAP.	
	C133	QETB1HM-106	10MF 50V E. CAP.	
	C134	QCF31HP-473Z	0.047MF 50V CER. CAP.	
	C191	QFV81HJ-104	0.1MF 50V THIN FILM	
	C192	QFV81HJ-104	0.1MF 50V THIN FILM	
	C196	QCF21HP-223A	0.022MF 50V CER. CAP.	BS EF EN G
	C199	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C201	QETC1EM-106ZM	10MF 25V AL. E. CAP.	
	C202	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C203	QCB1HK-331Y	330PF 50V CER. CAP.	
	C204	QCF31HP-473Z	0.047MF 50V CER. CAP.	
	C205	QETB1HM-106	10MF 50V E. CAP.	
	C206	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C207	QCF31HP-473Z	0.047MF 50V CER. CAP.	
	C208	QETC1EM-106ZM	10MF 25V AL. E. CAP.	
	C210	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C301	QCB1HK-101Y	100PF 50V CER. CAP.	
	C302	QCB1HK-101Y	100PF 50V CER. CAP.	
	C303	QCB1HK-101Y	100PF 50V CER. CAP.	
	C304	QCB1HK-101Y	100PF 50V CER. CAP.	

△	Item	Parts Number	Description	Area
	C305	QER51CM-476	47MF 16V AL. E. CAP.	
	C306	QER51CM-476	47MF 16V AL. E. CAP.	
	C307	QFV81HJ-104	0.1MF 50V THIN FILM	
	C308	QER61EM-106	10MF 25V AL. E. CAP.	
	C331	QCB1CM-222Y	2200PF 16V CER. CAP.	
	C332	QCB1CM-222Y	2200PF 16V CER. CAP.	
	C373	QCVB1CM-103Y	0.01MF 16V CER. CAP.	
	C401	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C402	QETC1EM-106ZM	10MF 25V AL. E. CAP.	
	C602	QCZ0205-155	1.5MF 25V C. CAP.	
	C603	QFV81HJ-104	0.1MF 50V THIN FILM	
	C605	QETC1EM-106ZM	10MF 25V AL. E. CAP.	
	C606	QCB1HK-102	1000PF 50V CER. CAP.	
	C607	QCB1HK-102	1000PF 50V CER. CAP.	
	C608	QETB1HM-105	1MF 50V AL. E. CAP.	
	C609	QCB1HK-101Y	100PF 50V CER. CAP.	
	C610	QFN31HJ-273Z	0.027MF 50V MYLAR CAP.	
	C611	QCB1CM-472Y	4700PF 16V CER. CAP.	
	C612	QCVB1CM-103Y	0.01MF 16V CER. CAP.	
	C613	QCB1HK-331Y	330PF 50V CER. CAP.	
	C614	QFV81HJ-104	0.1MF 50V THIN FILM	
	C615	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C616	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C617	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C618	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C619	QCB1HK-271Y	270PF 50V CER. CAP.	
	C620	QCSB1HJ-470Y	47PF 50V CER. CAP.	
	C621	QCB1HK-102	1000PF 50V CER. CAP.	
	C622	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C623	QFV81HJ-104	0.1MF 50V THIN FILM	
	C625	QCZ0205-155	1.5MF 25V C. CAP.	
	C631	QETB1CM-477M	470MF 16V E. CAP.	
	C632	QETB1AM-477	470MF 10V E. CAP.	
	C633	QCB1HK-101Y	100PF 50V CER. CAP.	
	C635	QCB1HK-101Y	100PF 50V CER. CAP.	
	C641	QCVB1CM-103Y	0.01MF 16V CER. CAP.	
	C642	QFN31HJ-103Z	0.01MF 50V MYLAR CAP.	
	C651	QCT30CH-120Y	12PF 50V CER. CAP.	
	C652	QCT30CH-120Y	12PF 50V CER. CAP.	
	C653	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C655	QFV81HJ-104	0.1MF 50V THIN FILM	
	C656	QFV81HJ-104	0.1MF 50V THIN FILM	
	C661	QCB1HK-471Y	470PF 50V CER. CAP.	
	C663	QFN31HJ-223ZM	0.022MF 50V MYLAR CAP.	
	C664	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C665	QFV81HJ-104	0.1MF 50V THIN FILM	
	C673	QETB0JM-108N	1000MF 6.3V E. CAP.	
	C674	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C679	QETB1CM-107	100MF 16V AL. E. CAP.	
	C680	QCZ0205-155	1.5MF 25V C. CAP.	
	C681	QETC1EM-106ZM	10MF 25V AL. E. CAP.	
	C682	QETC1EM-106ZM	10MF 25V AL. E. CAP.	
	C683	QCB1CM-122Y	1200PF 16V CER. CAP.	
	C684	QCB1CM-122Y	1200PF 16V CER. CAP.	
	C801	QCSB1HJ-680	68PF 50V CER. CAP.	
	C804	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C805	QETC1EM-106ZM	10MF 25V AL. E. CAP.	
	C806	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C807	QETC1EM-106ZM	10MF 25V AL. E. CAP.	
	C811	QCSB1HJ-680	68PF 50V CER. CAP.	
	C814	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C815	QER61EM-106	10MF 25V AL. E. CAP.	
	C816	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C817	QER61EM-106	10MF 25V AL. E. CAP.	
	C821	QCSB1HJ-680	68PF 50V CER. CAP.	
		RESISTORS		
	R111	QRD161J-222	2.2K 1/6W CARBON RE	
	R112	QRD161J-221	220 1/6W CARBON RE	
	R113	QRD161J-221	220 1/6W CARBON RE	
	R114	QRD161J-202	2K 1/6W CARBON RE	
	R115	QRD161J-103	10K 1/6W CARBON RE	
	R116	QRD161J-122	1.2K 1/6W CARBON RE	
	R117	QRD161J-1R0	1 1/6W CARBON RE	
	R119	QRD161J-202	2K 1/6W CARBON RE	
	R121	QRD161J-331	330 1/6W CARBON RE	
	R122	QRD161J-123	12K 1/6W CARBON RE	
	R123	QRD161J-273	27K 1/6W CARBON RE	
	R124	QRD161J-221	220 1/6W CARBON RE	
△	R131	QRZ0077-560	56 1/4W FUSIBLE RE	

Electrical Parts List (CD / Changer control PCB)

△	Item	Parts Number	Description	Area
		I. C. S		
	IC 701	MSC7112-01GS-2K	I. C.	
	IC 702	GPIU281X	INFRARED DETECT UNIT	
		DIODES		
	D 701	SLA-380LT	L. E. D.	
	D 701	SLR-342VC3F	L. E. D.	
	D 701	SLR-342VC3F	L. E. D.	
	D 701	SLR-342VC3F	L. E. D.	
	D 701	SLR-342VC3F	L. E. D.	
	D 701	SLR-342VC3F	L. E. D.	
	D 701	SLR-342VC3F	L. E. D.	
	D 701	SLR-342VC3F	L. E. D.	
		TRANSISTORS		
	Q 921	2SC1740S (R, S)	SI. TRANSISTOR	
		CAPACITORS		
	C 701	QER51HM-475	AL. E. CAP.	
	C 702	QER51HM-475	AL. E. CAP.	
	C 703	QCHB1EZ-223	CER. CAP. (S)	
	C 704	QER61EM-106	AL. E. CAP.	
	C 705	QCHB1EZ-223	CER. CAP. (S)	
	C 706	QCHB1EZ-223	CER. CAP. (S)	
	C 707	QCHB1EZ-223	CER. CAP. (S)	
	C 708	QER61EM-106	AL. E. CAP.	
	C 709	QCB1HK-101Y	CER. CAP. (S)	
	C 716	QETC1EM-106ZM	AL. E. CAP.	
	C 717	QCHB1EZ-223	CER. CAP. (S)	
	C 911	QCHB1EZ-223	CER. CAP. (S)	
		RESISTORS		
	R 701	QRD161J-221	220 1/6W CARBON RES.	
	R 701	QRD161J-221	220 1/6W CARBON RES.	
	R 701	QRD161J-221	220 1/6W CARBON RES.	
	R 701	QRD161J-221	220 1/6W CARBON RES.	
	R 701	QRD161J-221	220 1/6W CARBON RES.	
	R 701	QRD161J-221	220 1/6W CARBON RES.	
	R 701	QRD161J-221	220 1/6W CARBON RES.	
	R 701	QRD161J-221	220 1/6W CARBON RES.	
	R 701	QRD161J-331	330 1/6W CARBON RES.	
	R 702	QRD161J-473	47K 1/6W CARBON RES.	
	R 911	QRD167J-431	430 1/6W CARBON RES.	
	R 912	QRD167J-431	430 1/6W CARBON RES.	
	R 913	QRD167J-431	430 1/6W CARBON RES.	
	R 914	QRD161J-472	4.7K 1/6W CARBON RES.	
	R 915	QRD161J-472	4.7K 1/6W CARBON RES.	
	R 916	QRD161J-472	4.7K 1/6W CARBON RES.	
	R 921	QRD161J-103	10K 1/6W CARBON RES.	
	R 922	QRD161J-202	2K 1/6W CARBON RES.	

△	Item	Parts Number	Description	Area
		OTHERS		
		E-NO. 214-9	SCOTCH TAPE	
		EMW10726-002	CIR. BOARD	
	S 701	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 711	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 712	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 713	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 714	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 715	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 716	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 717	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 718	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 719	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 720	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 721	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 722	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 723	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 731	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 732	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 733	QSQ1001-E01ZJ7	PUSH SWITCH	
	S 901	ESS1200-002	LEVER SWITCH	
	S 902	ESS1200-002	LEVER SWITCH	
	S 903	QSEC001-E03	LEVER SWITCH	
	S 904	QSEC001-E03	LEVER SWITCH	
	BK 701	E308192-001	FL. HOLDER	
	CN 701	EMV7160-021	CONNECTOR	
	CN 702	EWS26B-A430	SOCKET WIRE	
	CN 704	EWS264-A430	SOCKET WIRE ASSY	
	CN 712	EMV5109-011A	MALE CONNECTOR	
	DI 701	QLF0026-001	FL. TUBE	
	FS 701	E306805-014	FELT SPACER	
	FW 713	EWR34B-08SST	FLAT WIRE	
	FW 901	EWR33B-08LST	FLAT WIRE	
	FW 902	EWR33B-08SST	FLAT WIRE	
	FW 903	EWR37B-45LST	FLAT WIRE	
	FW 904	EWR33B-08SST	FLAT WIRE	
	FW 905	EWR38B-25LST	FLAT WIRE	
	JS 711	QSJ4002-E01	PUSH SWITCH	
	PH 911	GP1A58HR	PHOTO INT.	
	PH 912	GP1A58HR	PHOTO INT.	
	PH 913	GP1A58HR	PHOTO INT.	
	PH 921	PT361FM	PHOTO. TR.	
	SP 701	VYH7653-009	I. C. HOLDER	

Electrical Parts List (System / CD control PCB)

△	Item	Parts Number	Description	Area
	R132	QRD161J-362	3.6K 1/6W CARBON RE	
	R133	QRD161J-362	3.6K 1/6W CARBON RE	
	R134	QRD161J-121	120 1/6W CARBON RE	
	R135	QRD161J-911	910 1/6W CARBON RE	
	R136	QRD161J-911	910 1/6W CARBON RE	
	R137	QRD161J-103	10K 1/6W CARBON RE	
	R138	QRD161J-103	10K 1/6W CARBON RE	
	R139	QRD161J-103	10K 1/6W CARBON RE	
	R151	QRD161J-153	15K 1/6W CARBON RE	
	R201	QRD161J-102	1K 1/6W CARBON RE	
	R202	QRD161J-472	4.7K 1/6W CARBON RE	
	R203	QRD161J-472	4.7K 1/6W CARBON RE	
	R204	QRD161J-472	4.7K 1/6W CARBON RE	
	R231	QRD161J-472	4.7K 1/6W CARBON RE	
	R232	QRD161J-472	4.7K 1/6W CARBON RE	
	R233	QRD161J-472	4.7K 1/6W CARBON RE	
	R234	QRD161J-472	4.7K 1/6W CARBON RE	
	R235	QRD161J-472	4.7K 1/6W CARBON RE	
	R236	QRD161J-472	4.7K 1/6W CARBON RE	
	R237	QRD161J-472	4.7K 1/6W CARBON RE	
	R238	QRD161J-472	4.7K 1/6W CARBON RE	
	R239	QRD161J-472	4.7K 1/6W CARBON RE	
	R240	QRD161J-472	4.7K 1/6W CARBON RE	
	R241	QRD161J-472	4.7K 1/6W CARBON RE	
	R243	QRD161J-472	4.7K 1/6W CARBON RE	
	R245	QRD161J-103	10K 1/6W CARBON RE	
	R246	QRD161J-103	10K 1/6W CARBON RE	
	R251	QRD161J-103	10K 1/6W CARBON RE	
	R301	QRD161J-223	22K 1/6W CARBON RE	
	R302	QRD161J-223	22K 1/6W CARBON RE	
	R303	QRD161J-223	22K 1/6W CARBON RE	
	R304	QRD161J-223	22K 1/6W CARBON RE	
	R305	QRD161J-202	2K 1/6W CARBON RE	
	R306	QRD161J-202	2K 1/6W CARBON RE	
	R307	QRD161J-202	2K 1/6W CARBON RE	
	R308	QRD161J-202	2K 1/6W CARBON RE	
	R309	QRD161J-273	27K 1/6W CARBON RE	
	R310	QRD161J-273	27K 1/6W CARBON RE	
	R311	QRD161J-101	100 1/6W CARBON RE	
	R312	QRD161J-101	100 1/6W CARBON RE	
	R331	QRD161J-561	560 1/6W CARBON RE	
	R332	QRD161J-561	560 1/6W CARBON RE	
	R333	QRD161J-101	100 1/6W CARBON RE	
	R334	QRD161J-101	100 1/6W CARBON RE	
	R335	QRD161J-103	10K 1/6W CARBON RE	
	R336	QRD161J-103	10K 1/6W CARBON RE	
	R341	QRD161J-471	470 1/6W CARBON RE	
	R343	QRD161J-101	100 1/6W CARBON RE	BS EF EN G
	R373	QRD161J-474	470K 1/6W CARBON RE	
	R374	QRD161J-274	270K 1/6W CARBON RE	
	R601	QRD161J-123	12K 1/6W CARBON RE	
	R603	QRD161J-125	1.2M 1/6W CARBON RE	
	R605	QRD161J-274	270K 1/6W CARBON RE	
	R606	QRD161J-154	150K 1/6W CARBON RE	
	R607	QRD161J-273	27K 1/6W CARBON RE	
	R609	QRD161J-114	110K 1/6W CARBON RE	
	R610	QRD161J-104	100K 1/6W CARBON RE	
	R611	QRD161J-473	47K 1/6W CARBON RE	
	R612	QRD161J-822	8.2K 1/6W CARBON RE	
	R613	QRD161J-121	120 1/6W CARBON RE	
	R614	QRD161J-100	10 1/6W CARBON RE	
	R615	QRD161J-120	12 1/6W CARBON RE	
	R616	QRD161J-910Y	91 1/6W CARBON RE	
	R641	QRD161J-683	68K 1/6W CARBON RE	
	R642	QRD161J-222	2.2K 1/6W CARBON RE	
	R643	QRD161J-822	8.2K 1/6W CARBON RE	
	R644	QRD161J-223	22K 1/6W CARBON RE	
	R645	QRD161J-223	22K 1/6W CARBON RE	
	R646	QRD161J-222	2.2K 1/6W CARBON RE	
	R647	QRD161J-472	4.7K 1/6W CARBON RE	
	R650	QRD161J-182	1.8K 1/6W CARBON RE	
	R651	QRD161J-102	1K 1/6W CARBON RE	
	R652	QRD161J-102	1K 1/6W CARBON RE	
	R653	QRD161J-102	1K 1/6W CARBON RE	
	R660	QRD161J-102	1K 1/6W CARBON RE	
	R661	QRD161J-683	68K 1/6W CARBON RE	
	R663	QRD161J-124	120K 1/6W CARBON RE	
	R664	QRD161J-471	470 1/6W CARBON RE	
	R665	QRD161J-271	270 1/6W CARBON RE	

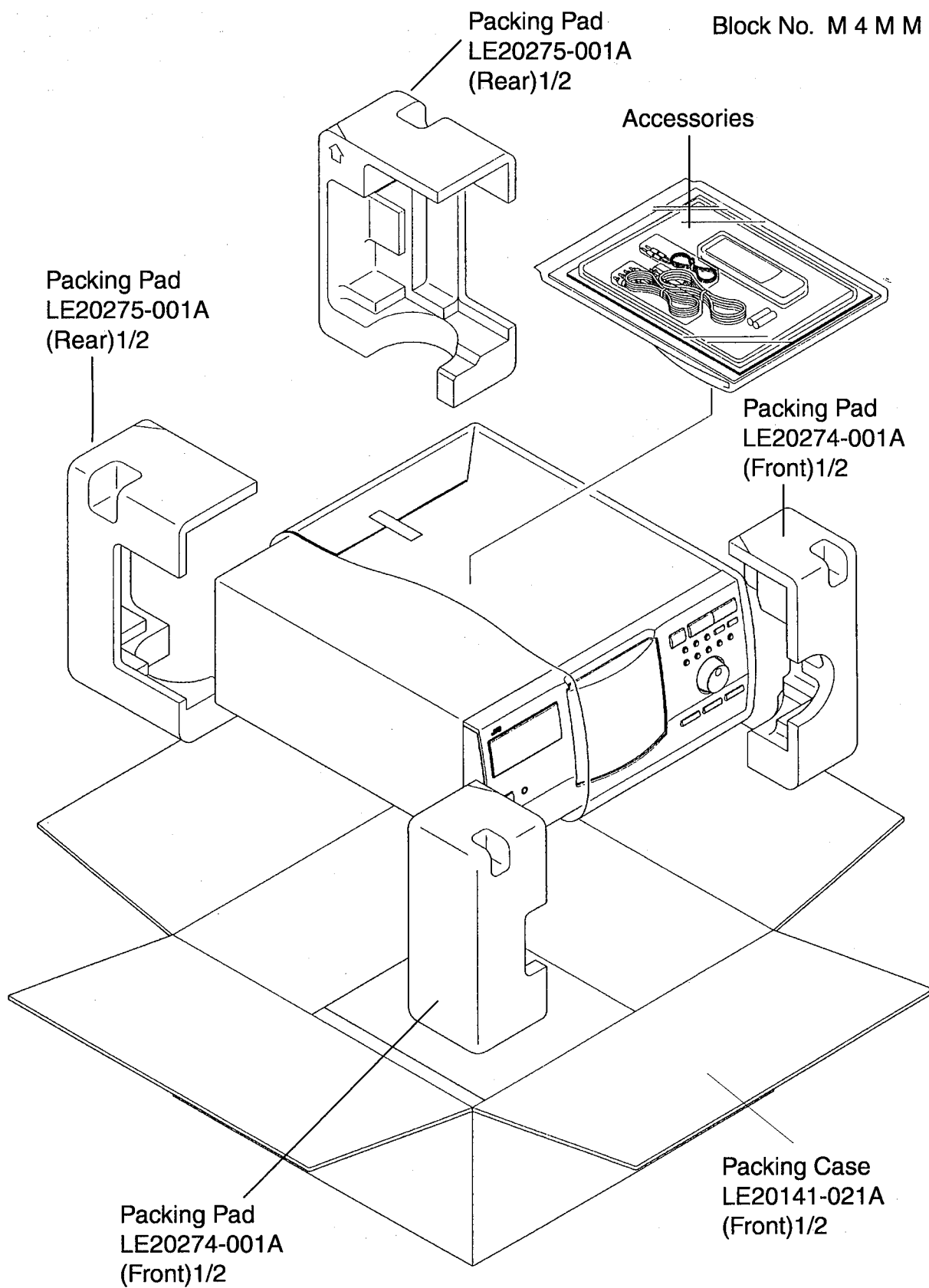
△	Item	Parts Number	Description	Area
	R666	QRD161J-750	75 1/6W CARBON RE	
	R667	QRD161J-220	22 1/6W CARBON RE	
	R681	QRD161J-102	1K 1/6W CARBON RE	
	R682	QRD161J-102	1K 1/6W CARBON RE	
	R683	QRD161J-223	22K 1/6W CARBON RE	
	R684	QRD161J-223	22K 1/6W CARBON RE	
	R691	QRD161J-181	180 1/6W CARBON RE	
	R741	QRD161J-331	330 1/6W CARBON RE	
	R742	QRD161J-331	330 1/6W CARBON RE	
	R743	QRD161J-331	330 1/6W CARBON RE	
	R801	QRD161J-223	22K 1/6W CARBON RE	
	R802	QRD161J-223	22K 1/6W CARBON RE	
	R803	QRD161J-153	15K 1/6W CARBON RE	
	R804	QRD161J-153	15K 1/6W CARBON RE	
	R805	QRD161J-101	100 1/6W CARBON RE	
	R811	QRD161J-203	20K 1/6W CARBON RE	
	R812	QRD161J-203	20K 1/6W CARBON RE	
	R813	QRD161J-183	18K 1/6W CARBON RE	
	R814	QRD161J-183	18K 1/6W CARBON RE	
	R815	QRD161J-101	100 1/6W CARBON RE	
	R821	QRD161J-203	20K 1/6W CARBON RE	
	R822	QRD161J-203	20K 1/6W CARBON RE	
	R823	QRD161J-243	24K 1/6W CARBON RE	
	R824	QRD161J-243	24K 1/6W CARBON RE	
	R825	QRD161J-101	100 1/6W CARBON RE	
		OTHERS		
		EMW10725-002	MAIN C.B.	
		QWE881-15RR	VINYL WIRE	U US UT
		QWE886-17RR	PIN WIRE	U US UT
		QWE888-15RR	VINYL WIRE	U US UT
		SBSE3008Z	SCREW	
△	J001	QMCB001-E02H	AC SOCKET	BS EF EN G
	J001	QMCB001-E03H	AC INLET	G J
	J102	QMS3501-020	PIN JACK	
	J301	EMN00TV-217A	PIN JACK	
△	P051	QSS1L2-E01	SLIDE SWITCH	U US UT
	X201	ECX0008-000KMZ	CRYSTAL	
	X651	ECX0169-344EF	CRYSTAL	
	CN001	EWS246-028	SOCKET WIRE	
	CN101	VMC0040-006	CONNECTOR	
	CN601	EMV7170-115R	CONNECT TERMINAL	
	CN602	EMV5109-006A	CONNECT TERMINAL	
	CN604	VMC0163-017	CONNECT TERMINAL	
	CN611	VMC0163-021	CONNECT TERMINAL	
	CN711	VMC0163-017	CONNECT TERMINAL	
	CN714	EMV5109-004A	MALE CONNECTOR	
	CN901	EMV7122-103	CONNECT TERMINAL	
	CN901	EMV7145-003Z	SOCKET ASSY	
	CN991	EMV7122-103	CONNECT TERMINAL	
	CN991	EMV7145-003Z	SOCKET ASSY	
△	OP101	ICP-N10	I. C. PROTECTOR	
	EP901	EMZ4002-002Z	EARTH PLATE	
	EP902	EMZ4002-002Z	EARTH PLATE	
	EP903	EMZ4002-002Z	EARTH PLATE	
	EP904	EMZ4002-002Z	EARTH PLATE	
	FW301	EWR37B-10SST	FLAT WIRE	
	HS111	E70306-001	HEAT SINK	
	JT903	EMV7122-103	CONNECT TERMINAL	
	JT903	EMV7145-003Z	SOCKET ASSY	
	JT904	EMV7122-004Z	CONNECT TERMINAL	
	JT904	EMV7145-004Z	SOCKET ASSY	
	JT905	EMV7122-004Z	CONNECT TERMINAL	
	JT905	EMV7145-004Z	SOCKET ASSY	
	JT906	EMV7122-004Z	CONNECT TERMINAL	
	JT906	EMV7145-004Z	SOCKET ASSY	
	SP201	VYH7653-001	LEAF SPRING	
	SP601	VYH7237-001	I. C. COVER	
	SP602	VYH7237-003	I. C. COVER	
	SP603	VYH7237-003	I. C. COVER	
	TH101	PTH8L07BB2R2N1B	POSITIVE THERMISTOR	
	TH102	PTH8L07BB2R2N1B	POSITIVE THERMISTOR	
	TW602	QWE350-08DR	TER. WIRE	

Accessories List

Block No. **M3MM**

△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	1	E30580-2620B	INSTRUCTION BOOK	1		J
	1	E30580-2621A	INSTRUCTION BOOK	1		C
	1	E30580-2622ABS	INSTRUCTION BOOK	1		BS
	1	E30580-2623A	INSTRUCTION BOOK	1		EFG
	1	E30580-2624A	INSTRUCTION BOOK	1		EN
	1	E30580-2625A	INSTRUCTION BOOK	1		UUSUT
	2	E309758-006	POLY BAG	1		
	3	E308801-008	PARTITION BOARD	1		
	4	NS4571-101	C.D BOOKLET	1		
△	6	QMP1E00-183J5	POWER CORD	1		CJ
△	6	QMP39F0-183E	POWER CORD	1		EFENGUS
△	6	QMP5520-1835BS	POWER CORD	1		BS
△	6	QMP7530-183	POWER CORD	1		UUT
	7	EWP302-011	SIGNAL CORD	1		
	8	EWP805-012	PLUG WIRE ASSY	1		
	9	RM-SX222EU	REMOCON	1		BSEFENGUSUT
	9	RM-SX222U	WIRE-LESS REMOTE CONTROL	1		CJ
	10	R6SPIT-2ST	DRY CELL	2		
	11	BT-52002-1	WARRANTY CARD	1		C
	12	BT-51001-1	WARRANTY CARD	1		J
	13	BT-54008-1	WARRANTY CARD	1		BSEFENG
	14	BT-20071B	SERVICE NETWORK	1		C
	15	E43486-340A	SAFETY SHEET	1		BS
	16	BT-20044G	SAFETY SHEET	1		J
	17	BT-51006-1	REGISTER CARD	1		J
△	18	ENZ2202-001	SIEMENS PLUG	1		US
△	18	ENZ2203-001	ADAPTOR PLUG	1		UUT
	19	E309758-021	POLY BAG	1		

Packing Materials and Part Numbers



JVC

VICTOR COMPANY OF JAPAN, LIMITED
AUDIO PRODUCTS DIVISION

10 - 1, 1 - chome Owatari - machi, Maebashi - city, Japan

