

MZ-G750/R700

SERVICE MANUAL

Ver 1.0 2001. 01



(Photo: MZ-G750)

*AEP Model
UK Model
Tourist Model
Hong Kong Model*

US and foreign patents licensed from Dolby Laboratories Licensing Corporation.

Model Name Using Similar Mechanism	NEW
Mechanism Type	MT-MZR700-172
Optical Pick-up Name	LCX-4R

SPECIFICATIONS

MD recorder

Audio playing system
MiniDisc digital audio system
Laser diode properties
Material: GaAlAs MQW
Wavelength: $\lambda = 790 \text{ nm}$
Emission duration: continuous
Laser output: less than $44.6 \mu\text{W}$
(This output is the value measured at a distance of 200 mm from the lens surface on the optical pick-up block with 7 mm aperture.)
Recording and playback time
When using MDW-80
Maximum 160 min. in monaural
Maximum 320 min. in stereo
Revolutions
350 rpm to 2,800 rpm (CLV)
Error correction
ACIRC (Advanced Cross Interleave Reed Solomon Code)
Sampling frequency
44.1 kHz
Sampling rate converter
Input: 32 kHz/44.1 kHz/48 kHz
Coding
ATRAC (Adaptive TRansform Acoustic Coding)
ATRAC3-LP2
ATRAC3-LP4

Modulation system
EFM (Eight to Fourteen Modulation)
Number of channels
2 stereo channels
1 monaural channel
Frequency response
20 to 20,000 Hz $\pm 3 \text{ dB}$
Wow and Flutter
Below measurable limit
Inputs
Microphone: stereo mini-jack, minimum input level 0.25 mV
Line in: stereo mini-jack, minimum input level 49 mV
Optical (Digital) in: optical (digital) mini-jack
Outputs
Ⓜ: stereo mini-jack, maximum output level 5 mW + 5 mW, load impedance 16 ohm

Radio (MZ-G750)

Frequency range
AM: 531-1,602 kHz
FM: 87.5-108.0 MHz
General
Power requirements
Sony AC Power Adaptor (supplied) connected at the DC IN 3 V jack:
230 V AC, 50/60 Hz (AEP model)
230-240 V AC, 50 Hz (UK/Hong Kong model)
100-240 V AC, 50/60 Hz (Other models)
Nickel cadmium rechargeable battery
NC-WMAA (supplied)
LR6 (size AA) alkaline battery (not supplied)

– Continued on next page –

FM/AM PORTABLE MINIDISC RECORDER
MZ-G750
PORTABLE MINIDISC RECORDER
MZ-R700

9-873-045-11 Sony Corporation
2001A0400-1 Audio Entertainment Group
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SONY[®]

MZ-G750/R700

Battery operation time
Battery life¹⁾ (MZ-G750)

When recording²⁾ (Unit: approx.hours) (EIAJ³⁾)

Batteries	Stereo	LP2	LP4
NC-WMAA Nickel Cadmium rechargeable battery ⁴⁾	4	6	7.5
LR6 (SG) Sony alkaline dry battery ⁵⁾	9 ⁶⁾	13 ⁶⁾	16 ⁶⁾

- 1) The battery life may be shorter due to operating conditions and the temperature of the location.
- 2) When you record, use a fully charged rechargeable battery.
- 3) Measured in accordance with the EIAJ (Electronic Industries Association of Japan) standard.
- 4) When using a 100% fully charged rechargeable battery.
- 5) When using a Sony LR6 (SG) "STAMINA" alkaline dry battery (produced in Japan).
- 6) Recording time may differ according to the alkaline batteries.

When playing (Unit: approx.hours) (EIAJ¹⁾)

Batteries	Stereo	LP2	LP4
NC-WMAA Nickel Cadmium rechargeable battery ²⁾	11.5	14	16
LR6 (SG) Sony alkaline dry battery ³⁾	36	42	48

- 1) Measured in accordance with the EIAJ (Electronic Industries Association of Japan) standard.
- 2) When using a 100% fully charged rechargeable battery.
- 3) When using a Sony LR6 (SG) "STAMINA" alkaline dry battery (produced in Japan).

When using the radio (EIAJ¹⁾)

Batteries	Approx. hours
NC-WMAA Nickel Cadmium rechargeable battery ²⁾	9.5
LR6 (SG) Sony alkaline dry battery ³⁾	28.5

- 1) Measured in accordance with the EIAJ (Electronic Industries Association of Japan) standard.
- 2) When using a 100% fully charged rechargeable battery.
- 3) When using a Sony LR6 (SG) "STAMINA" alkaline dry battery (produced in Japan).

Battery life¹⁾ (MZ-R700) (Unit: approx.hours) (EIAJ²⁾)

Batteries		Stereo	LP2	LP4
NC-WMAA Nickel Cadmium rechargeable battery ³⁾	Recording	4	6	7.5
	Playback	13	14.5	18
LR6 (SG) Sony alkaline dry battery ⁴⁾	Recording	9	13	16
	Playback	40	46	53

- 1) The battery life may be shorter due to operating conditions and the temperature of the location.
- 2) Measured in accordance with the EIAJ (Electronic Industries Association of Japan) standard.
- 3) When using a 100% fully charged rechargeable battery.
- 4) When using a Sony LR6 (SG) "STAMINA" alkaline dry battery (produced in Japan).

Dimensions

Approx. 81 × 74.4 × 28.1 mm (w/h/d)
(3 1/4 × 3 × 1 1/8 in.) without projections.

Mass

Approx. 118 g (4 5/32 oz) the recorder only (MZ-G750)

Approx. 116 g (4.1 oz) the recorder only (MZ-R700)

Supplied accessories

AC power adaptor (1)

Headphones/earphones with a remote control (1)

Optical cable (1)

NC-WMAA nickel cadmium rechargeable

battery (1)

Rechargeable battery carrying case (1)

Carrying pouch/carrying case with a belt clip (except U.S.A model) (1)

Design and specifications are subject to change without notice.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

CAUTION

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

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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SECTION 1 SERVICING NOTE

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

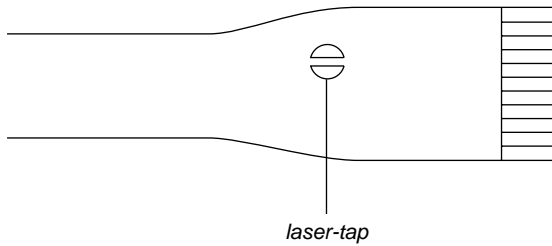
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

Never look into the laser diode emission from right above when checking it for adjustment. It is feared that you will lose your sight.

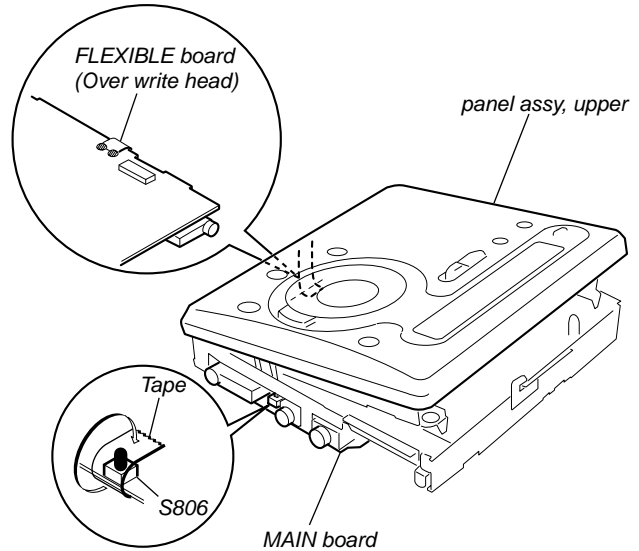
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK (LCX-4R)

The laser diode in the optical pick-up block may suffer electrostatic break-down easily. When handling it, perform soldering bridge to the laser-tap on the flexible board. Also perform measures against electrostatic break-down sufficiently before the operation. The flexible board is easily damaged and should be handled with care.



OPTICAL PICK-UP FLEXIBLE BOARD

- In performing the repair with the power supplied to the set, removing the MAIN board causes the set to be disabled. In such a case, fix a convex part of the open/close detect switch (S806 on MAIN board) with a tape in advance. Handle the FLEXIBLE board (overwrite head) with care, as it has been soldered directly to the MAIN board. In repairing the component side of MAIN board, connect the FLEXIBLE board (overwrite head) and the MAIN board with the lead wires in advance. (See page 8)



- Replacement of CDX2671-203GA (IC801) used in this set requires a special tool.
- On the set having the microcomputer version 1.000, some adjusted values were set in the manual mode at the shipment, but these data will be cleared when the NV is reset. Therefore, on the set having the microcomputer version 1.000, change the adjusted values following the Change of Adjusted Values immediately after the NV was reset. (See page 18)
- If the nonvolatile memory was replaced on the set, the modified program data must be written to the nonvolatile memory. In such a case, write the modified data that meets the microcomputer version following the patch data rewriting procedure at the replacement of nonvolatile memory. (See page 23)

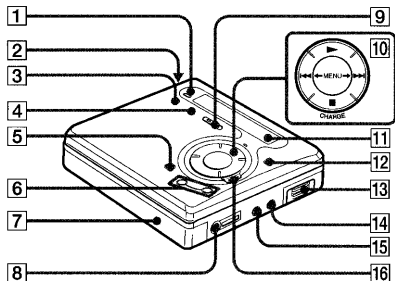
**SECTION 2
GENERAL**

This section is extracted from instruction manual.

Looking at the controls (MZ-G750)

See pages in () for more details.

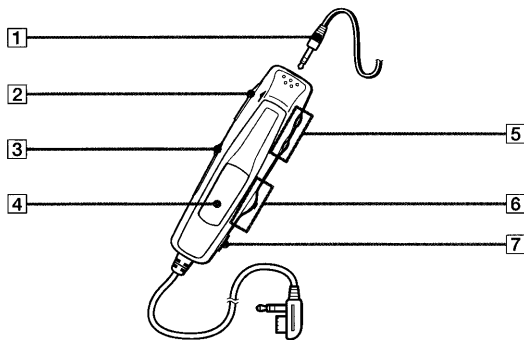
The recorder



- 1 REC MODE button (28)
- 2 OPEN button (13)
- 3 T MARK button (52)
- 4 END SEARCH button (16)(56)
- 5 **||** (pause) button (17)(20)(33)(56)
- 6 VOL +/- button (19)(56)
- 7 DC IN 3V jack (12)(15)
- 8 (headphones) jack (13)(43)
- 9 REC (record) switch (16)(27)
- 10 **←**MENU**→** button (30)(37)(50)
- 11 **▶** (play) button (16)(19)
- 12 **◀◀/▶▶** (search/AMS) button (17)(20)(53)(56)
- 13 **■** (stop)/CHARGE button (12)(16)(19)(29)(50)
- 14 Display window (30)(37)
- 15 ENTER button (29)(37)(49)
- 16 Battery compartment (12)
- 17 LINE IN (OPTICAL) jack (15)(27)
- 18 MIC (PLUG IN POWER) jack (32)
- 19 HOLD switch (13)(42)

8

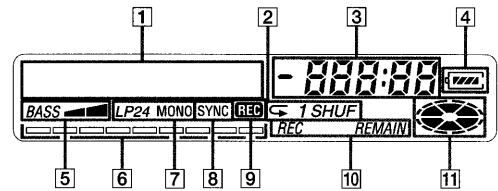
The remote control with built-in digital tuner



- 1 Headphones/earphones
Can be replaced with optional headphones/earphones.
- 2 HOLD switch (13)(42)
Slide to lock the controls of the remote control.
- 3 RADIO ON/BAND button (22)(45)
FM MODE button (23)
- 4 Display window (45)
- 5 VOL +/- buttons (19)(22)
- 6 Jog lever
- 7 **||** (pause)/MODE (20)(45)
- 8 **▶▶▶** (AMS/search, play)/F+ button (19)(22)(46)
- 9 **◀◀◀** (AMS/search)/F- button (20)(22)(46)
- 10 **■** (stop)/RADIO OFF button (19)(23)(48)

10

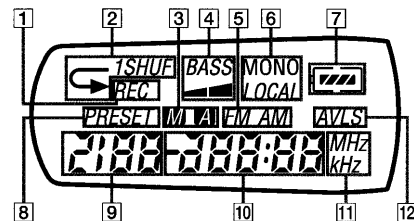
The display window



- 1 Character information display (35)(40)
Displays the disc and track names, error messages, track numbers, etc.
- 2 Play mode indication (37)
Shows the play mode of the MD.
- 3 Time display
- 4 Battery indication (59)
Shows approximate battery condition.
- 5 Mega bass indication (39).
- 6 Level meter (34)
Shows the volume of the MD being played or recorded.
- 7 Recording mode (LP2/LP4/MONO) indication (28)
- 8 SYNC (synchro-recording) indication
- 9 REC indication (16)
Lights up while recording. When flashing, the recorder is in record standby mode.
- 10 REC REMAIN/REMAIN (remaining time/tracks) indication (35)(40)
Lights up along with the remaining time of the track, the remaining time of the MD, or the remaining number of tracks.
- 11 Disc indication
Shows that the disc is rotating for recording, playing or editing an MD.

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The display window of the remote control



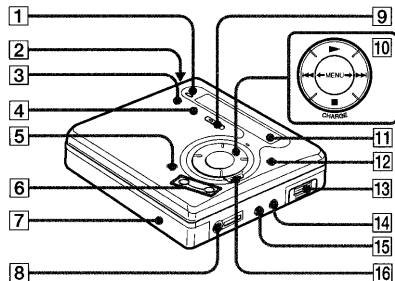
- 1 REC indication (16)
Lights up while recording. When flashing, the recorder is in record standby mode.
- 2 Play mode indication (37)
Shows the play mode of the MD.
- 3 Manual/Auto indication
- 4 Mega Bass indication (39)
- 5 FM/AM indication (45)
- 6 MONO (monaural)/LOCAL indication
- 7 Battery indication
- 8 PRESET indication (45)
Lights up while preset radio station is turned on.
- 9 Number display
Displays the preset numbers, track numbers, etc.
- 10 Time/Frequency display
- 11 MHz/kHz indication (45)
MHz lights up when FM station is turned on and kHz lights up when AM station is turned on.
- 12 AVLS indication (41)

11

Looking at the controls (MZ-R700)

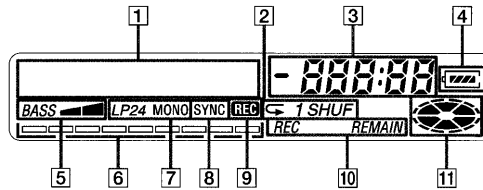
See pages in () for more details.

The recorder



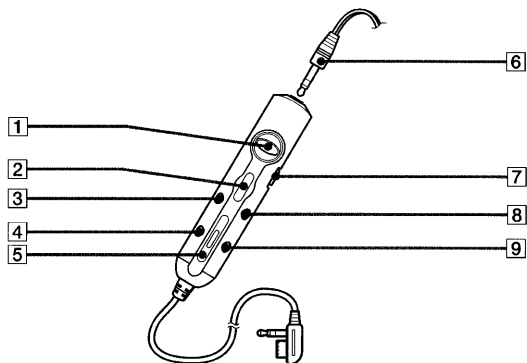
- 1 REC MODE button (24)
- 2 OPEN button (12)
- 3 T MARK button (42)
- 4 END SEARCH button (15) (48)
- 5 **||** (pause) button (15) (19) (29) (44) (48)
- 6 VOL +/- button (18) (48)
- 7 DC IN 3V jack (11) (14) (51)
- 8 (headphones) jack (12) (39)
- 9 REC (record) switch (15) (23)
- 10 **←**MENU**→** button (26) (33) (42)
- 11 **▶** (play) button (15) (18)
- 12 **◀◀/▶▶** (search/AMS) button (15) (19) (44)
- 13 **■** (stop)/CHARGE button (11) (15) (18) (25)
- 14 Display window (30)
- 15 ENTER button (25) (33) (41)
- 16 Battery compartment (11)
- 17 LINE IN (OPTICAL) jack (14) (23)
- 18 MIC (PLUG IN POWER) jack (28)
- 19 HOLD switch (12) (38)

The display window



- 1 Character information display (32) (34)
Displays the disc and track names, error messages, track numbers, etc.
- 2 Play mode indication (34)
Shows the play mode of the MD.
- 3 Time display
- 4 Battery indication (50)
Shows approximate battery condition.
- 5 Mega bass indication (35)
- 6 Level meter (30)
Shows the volume of the MD being played or recorded.
- 7 Recording mode (LP2/LP4/MONO) indication
- 8 SYNC (synchro-recording) indication
- 9 REC indication (15)
Lights up while recording. When flashing, the recorder is in record standby mode.
- 10 REC REMAIN/REMAIN (remaining time/tracks) indication (32) (36)
Lights up along with the remaining time of the track, the remaining time of the MD, or the remaining number of tracks.
- 11 Disc indication
Shows that the disc is rotating for recording, playing or editing an MD.

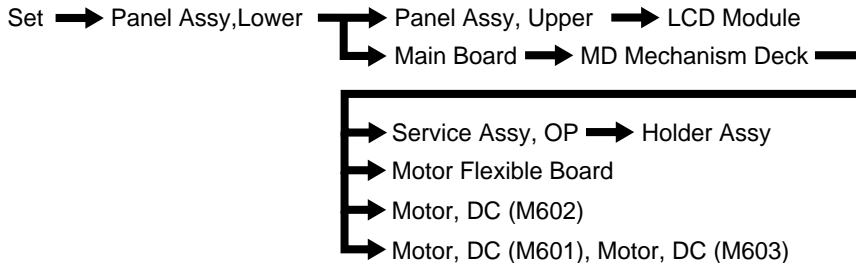
The remote control



- 1 **◀◀/▶▶/▶** (search/AMS/play) • **▶** button (18) (31) (33) (42) (48)
- 2 **■** (stop) • ENTER button (18) (31) (33) (42)
- 3 **||** (pause) • CAPS button (19) (44) (48)
- 4 EDIT button (33) (41) (48)
- 5 VOL +/- buttons (18) (48)
- 6 Headphones/earphones
Can be replaced with optional headphones/earphones.
- 7 HOLD switch (38)
Slide to lock the controls of the remote control.
- 8 T MARK button (42) (48)
- 9 DELETE button (48)

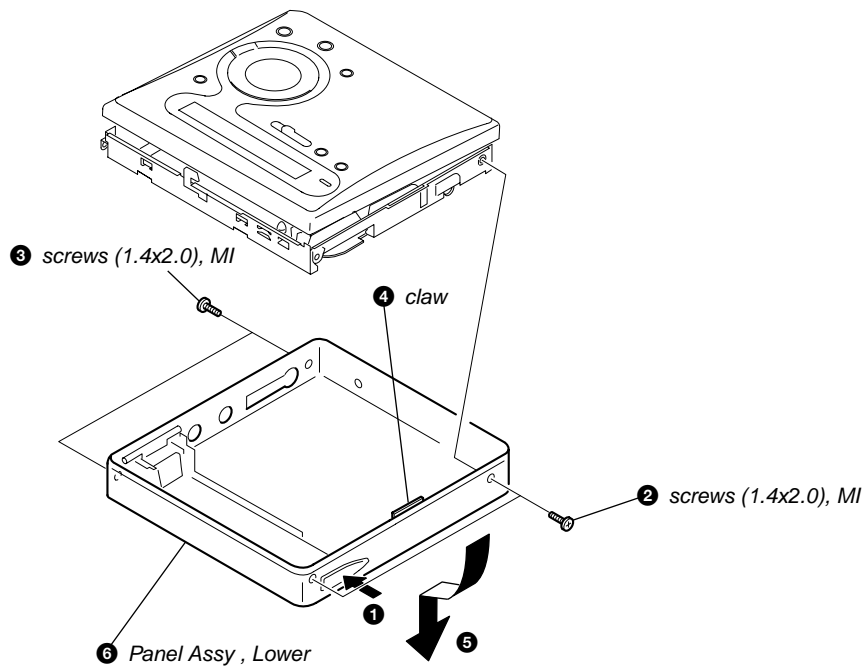
SECTION 3 DISASSEMBLY

Note : This set can be disassemble according to the following sequence.

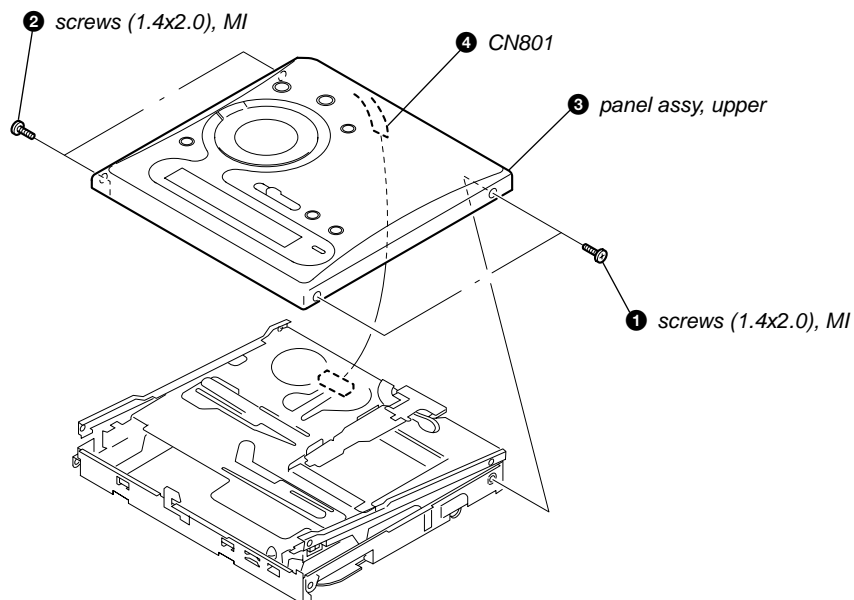


Note : Follow the disassembly procedure in the numerical order given.

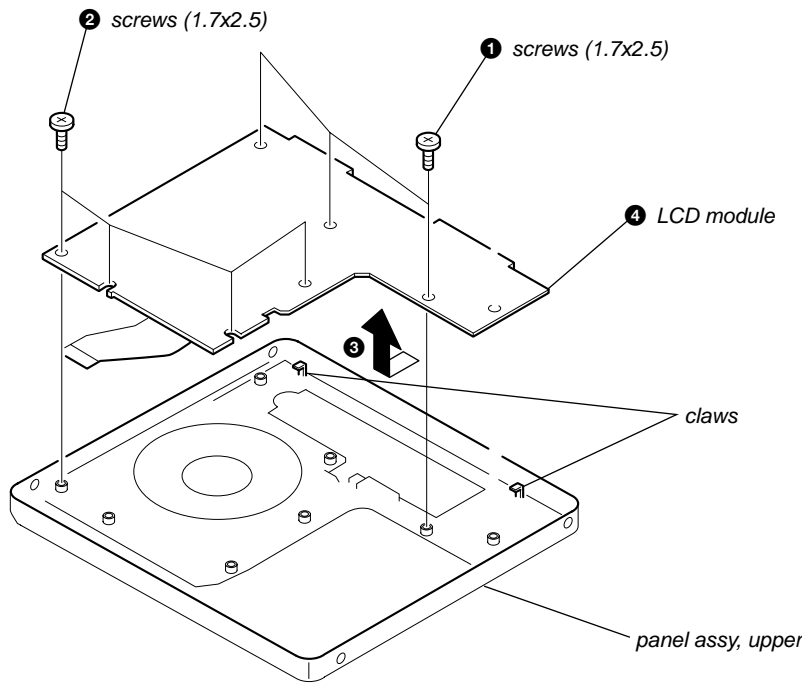
3-1. PANEL ASSY, LOWER



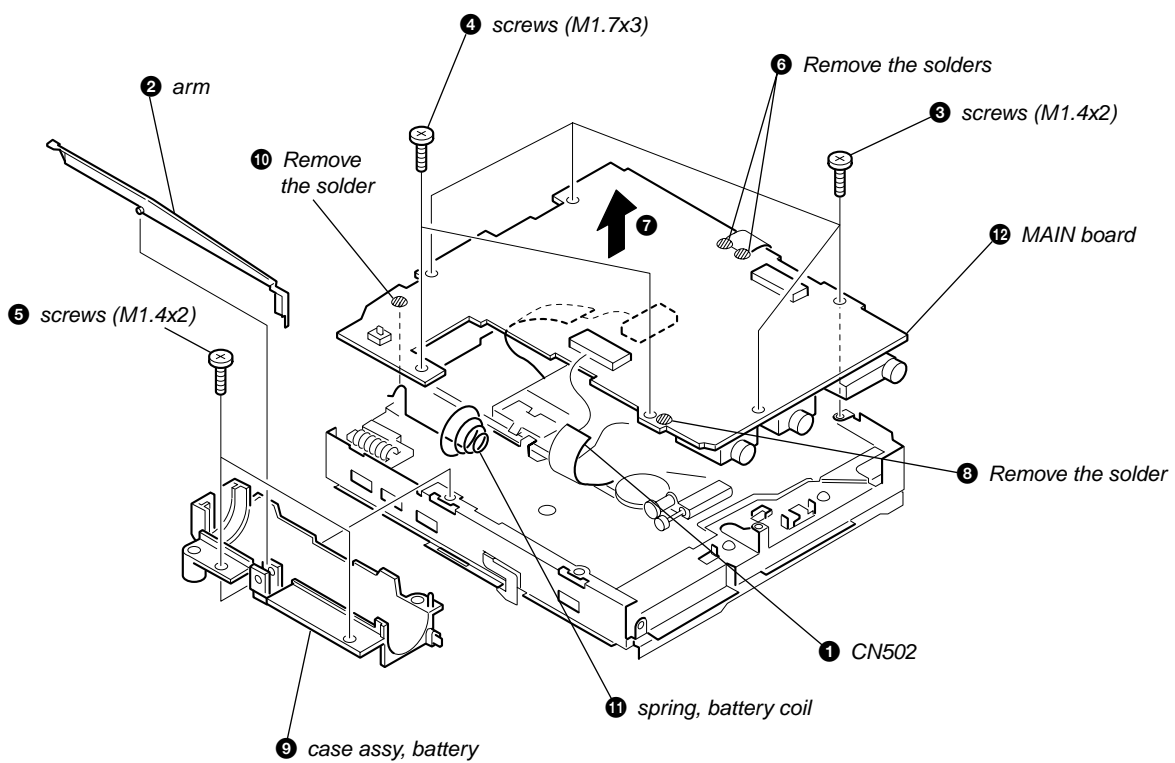
3-2. PANEL ASSY, UPPER



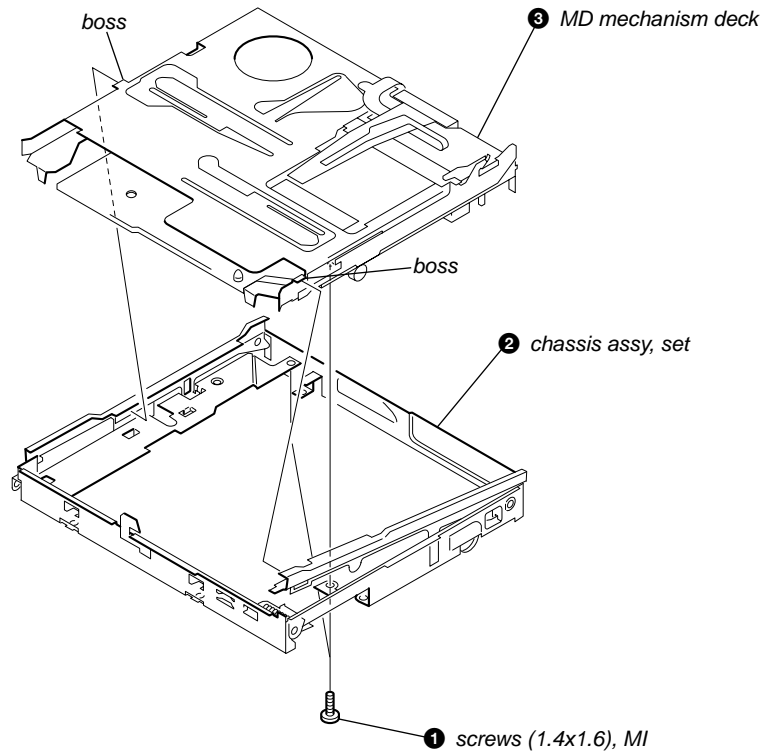
3-3. LCD MODULE



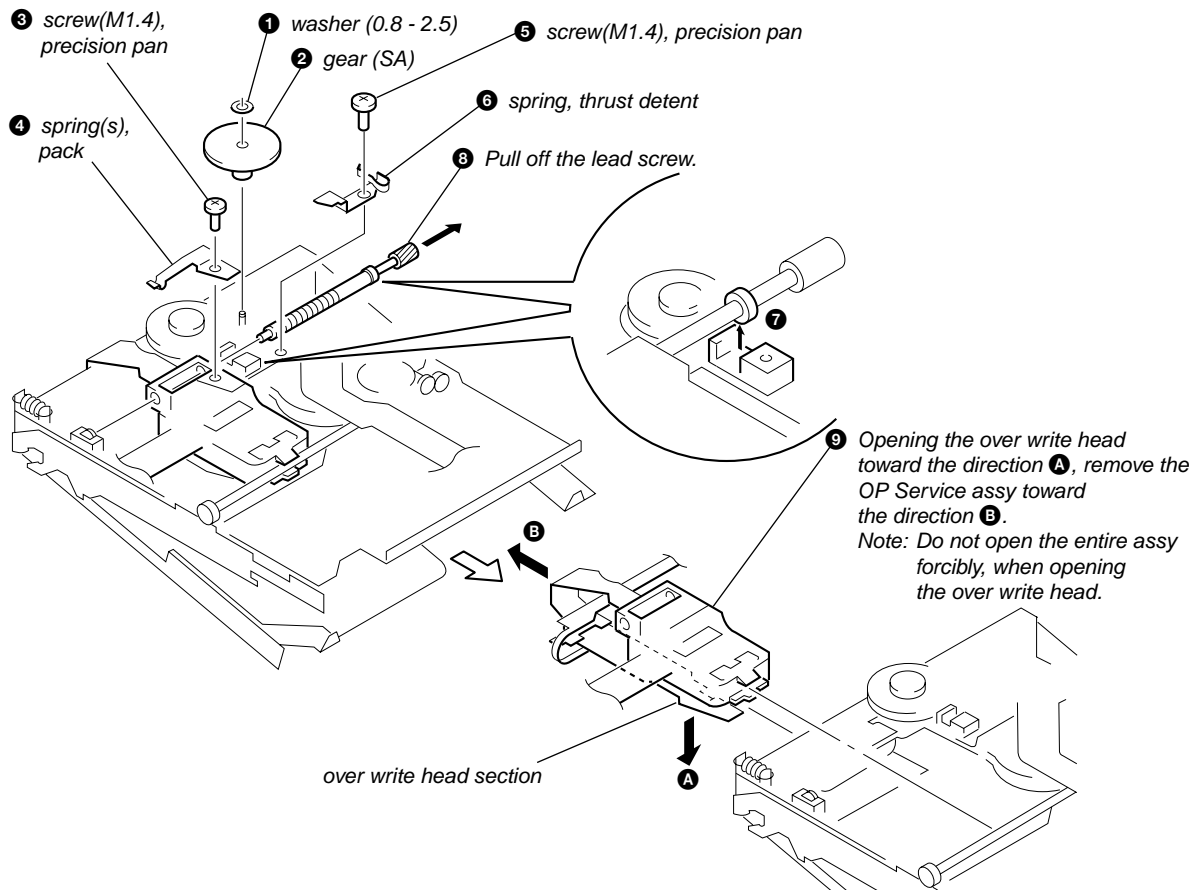
3-4. MAIN BOARD



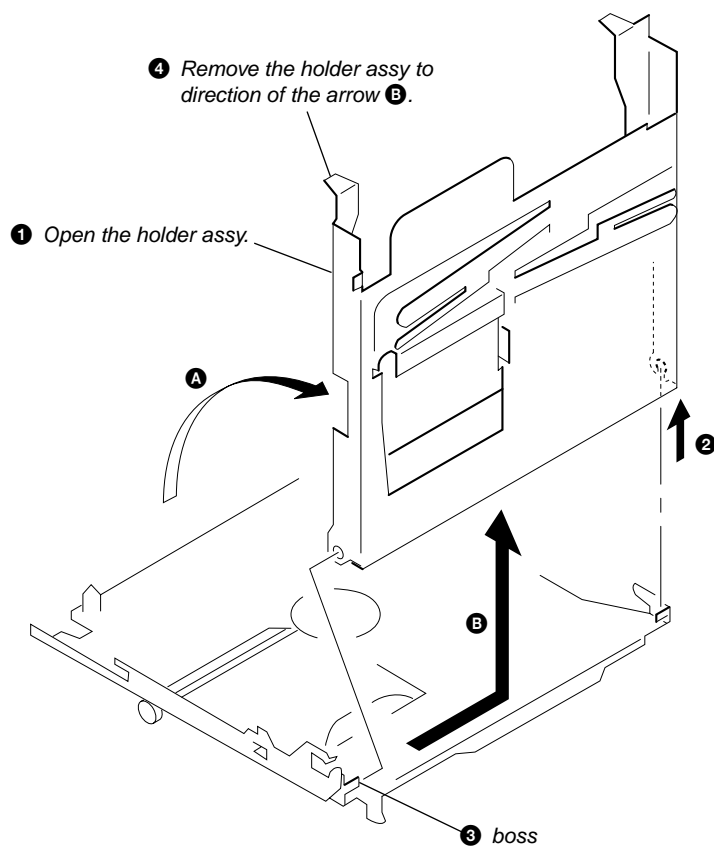
3-5. MD MECHANISM DECK



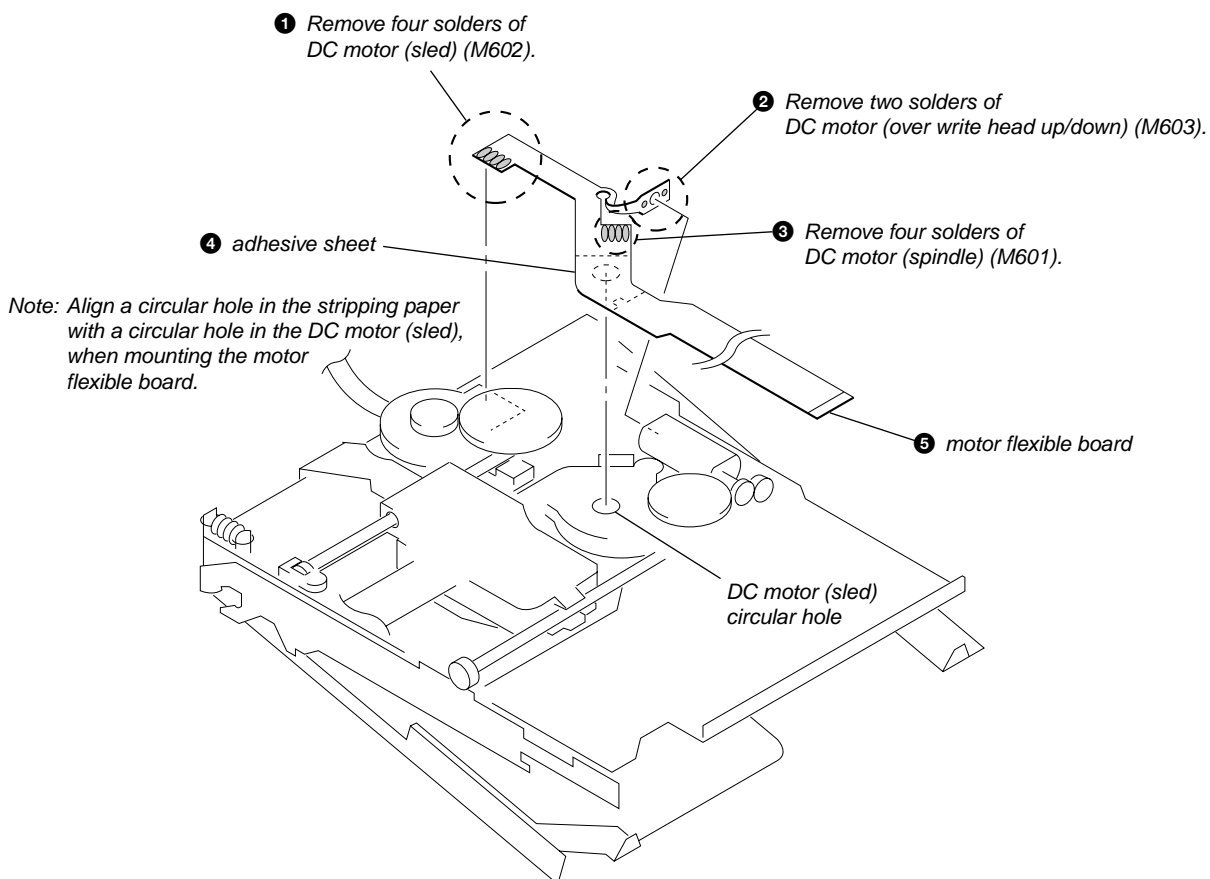
3-6. SERVICE ASSY, OP



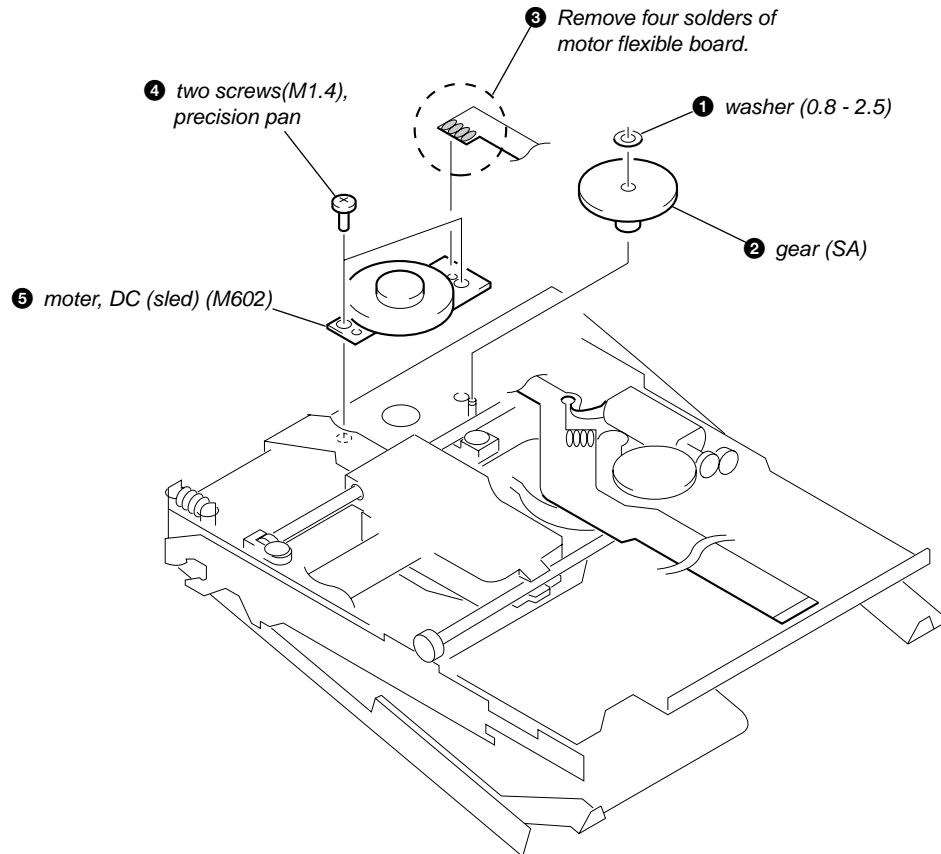
3-7. HOLDER ASSY



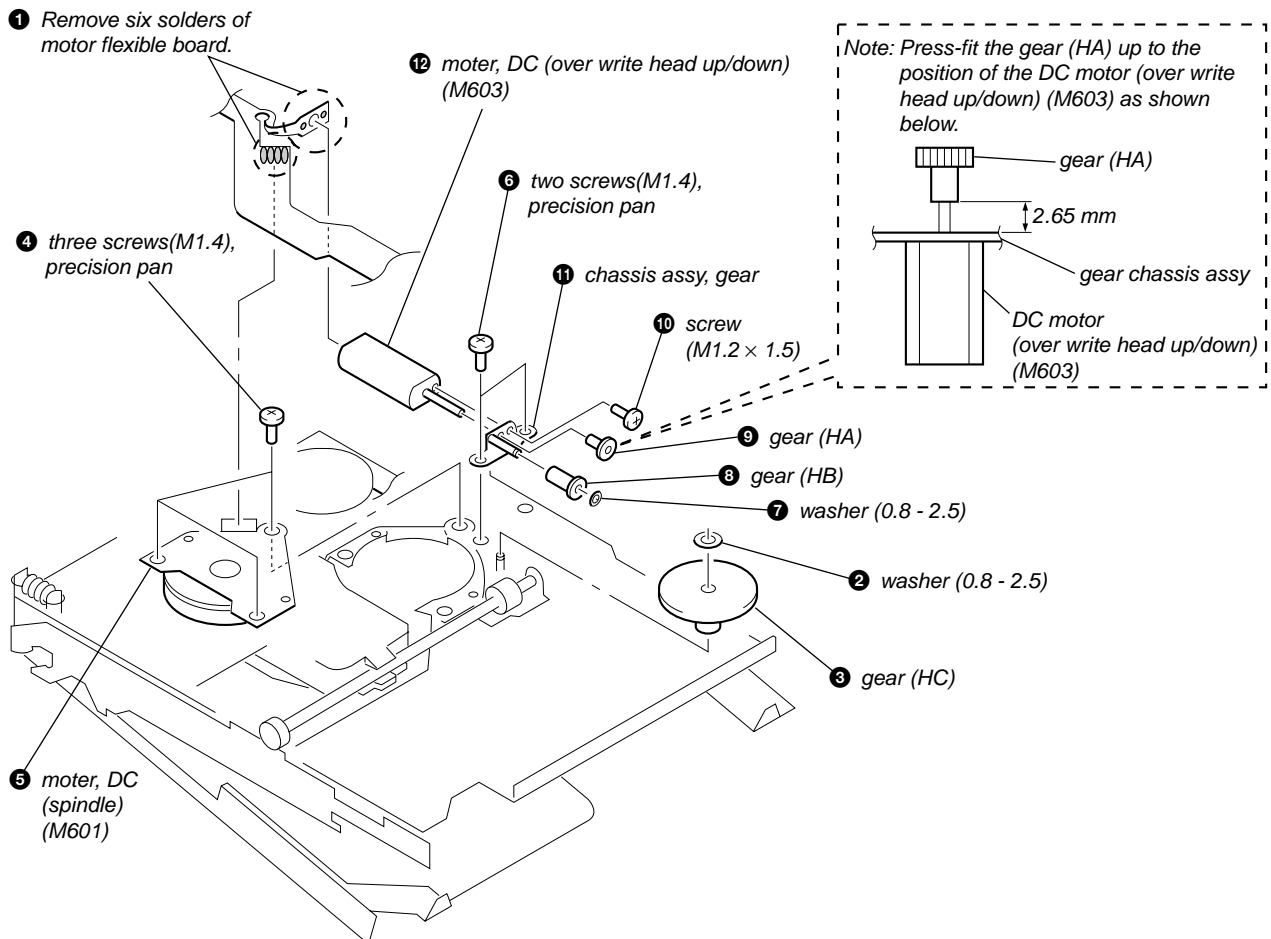
3-8. MOTOR FLEXIBLE BOARD



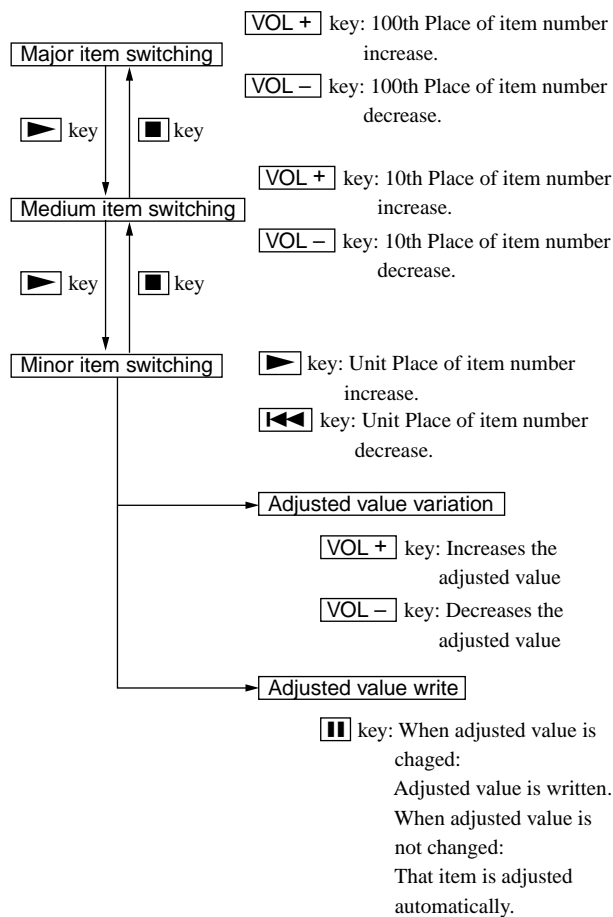
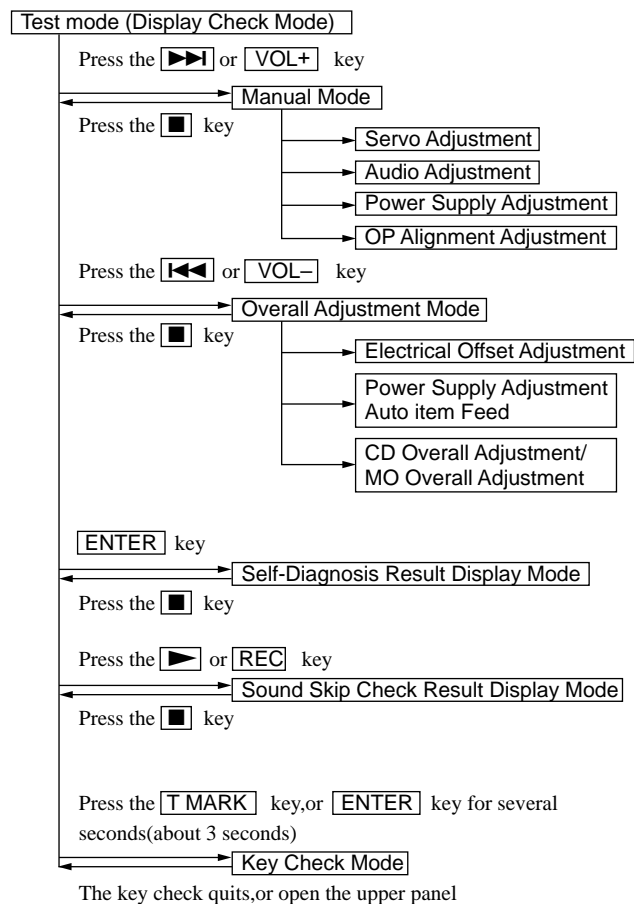
3-9. MOTOR, DC (M602)



3-10. "MOTOR, DC (M601)", "MOTOR, DC (M603)"



4-5. Configuration of Test Mode



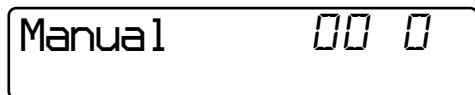
4-6. Manual Mode

Mode to adjust or check the operation of the set by function. Normally, the adjustment in this mode is not executed. However, the Manual mode is used to clear the memory, power supply adjustment, and laser power check before performing automatic adjustments in the Overall Adjustment mode.

• Transition method in Manual Mode

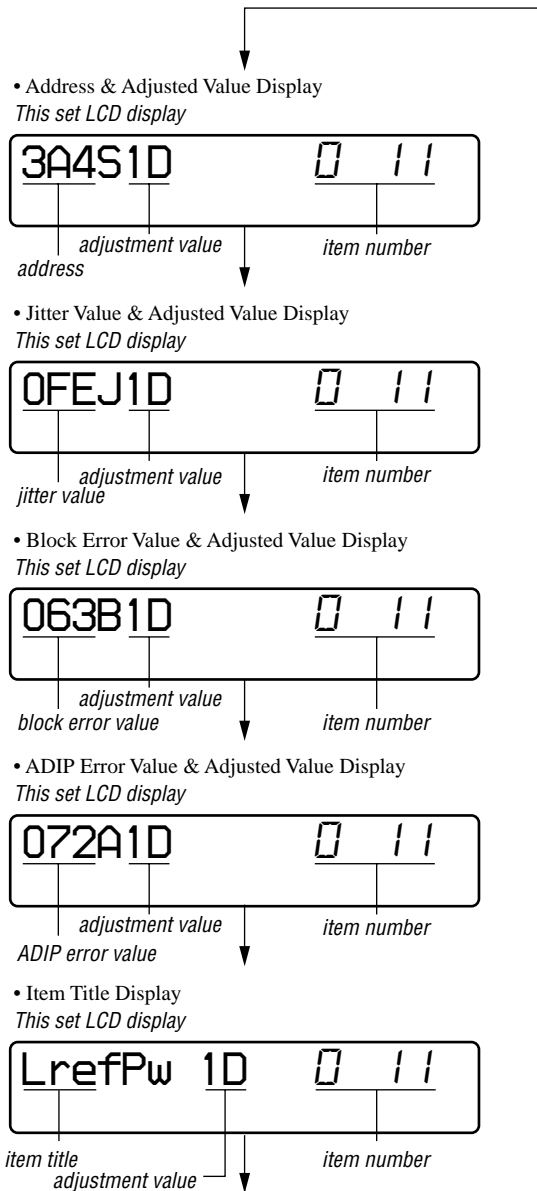
1. Setting the test mode (see page 12).
2. Press the [▶▶] or [VOL+] key activates the manual mode where the LCD display as shown below.

This set LCD display



3. During each test, the optical pick-up moves outward or inward while the [▶] or [◀◀] key is pressed for several seconds respectively.
4. Each test item is assigned with a 3-digit item number; 100th place is a major item, 10th place is a medium item, and unit place is a minor item. The values adjusted in the test mode are written to the nonvolatile memory (for the items where adjustment was made).

5. The display changes as shown below each time the **ENTER** key on the set is pressed.



However in the power mode (item number 700's), only the item is displayed.

6. Quit the manual mode, and press the **■** key to return to the test mode (display check mode).

4-7. Overall Adjustment Mode

Mode to adjust the servo automatically in all items. Normally, automatic adjustment is executed in this mode at the repair.

For further information, refer to "Section 5 Electrical Adjustments" (see page 18).

4-8. Self-Diagnosis Result Display Mode

This set uses the self-diagnostic function system in which if an error occurred during the recording or playing, the mechanism control block and the power supply control block in the microcomputer detect it and record its cause as history in the nonvolatile memory.

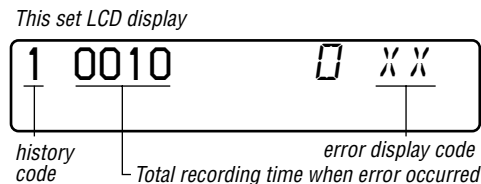
By checking this history in the test mode, you can analyze a fault and determine its location.

Total recording time is recorded as a guideline of how long the optical pickup has been used, and by comparing it with the total recording time at the time when an error occurred in the self-diagnosis result display mode, you can determine when the error occurred.

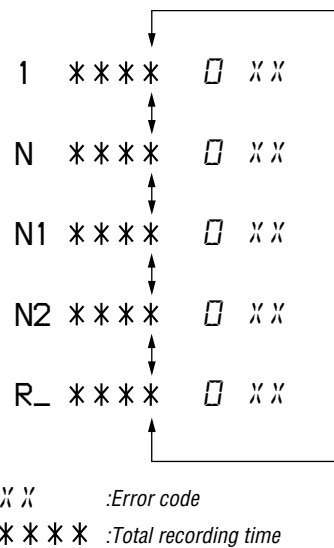
Clear both self-diagnosis history data and total recording time, if the optical pickup was replaced.

• Self-Diagnosis Result Display Mode Setting Method

1. Setting the test mode (see page 12).
2. In the display check mode, press the **ENTER** key activates the self-diagnosis result display mode where the LCD display as shown below.



3. Then, each time the **▶▶** key is pressed, LCD display descends by one as shown below. Also, the LCD display ascends by one when the **◀◀** key is pressed.



If the **ENTER** key on set is pressed with this display, the LCD switches to the simple display mode.

4. Quit the self-diagnosis result display mode, and press the **■** key to return to the test mode (display check mode).

• Description of Error Indication Codes

Problem	Indication code	Meaning of code	Simple display	Description
No error	00	No error	---	No error
Servo system error	01	Illegal access target address was specified	Adrs	Attempt to access an abnormal address
	02	High temperature	Temp	High temperature
	03	Focus error	Fcus	Disordered focus
	04	Spindle error	Spdl	Abnormal rotation of disc
TOC error	11	TOC error	TOC	Faulty TOC contents
	12	Data reading error	Data	Data could not be read at SYNC
Power supply system error	22	Low battery	LBat	Momentary interruption detected
Offset system error	31	Offset error	Ofst	Offset error
	32	Focus error ABCD offset error	ABCD	Focus error ABCD offset error
	33	Tracking error Offset error	TE	Tracking error Offset error
	34	X1 tracking error Offset error	X1TE	X1 tracking error Offset error

• Description of Indication History

History code number	Description
1	The first error
N	The last error
N1	One error before the last.
N2	Two errors before the last.
R_	Total recording time

4-9. Reset the error display code

After servicing, reset the error display code.

• Setting method of Reset the Error Display Code

1. Setting the test mode (see page 12).
2. Press **[ENTER]** key activates the self-diagnosis result display mode.
3. To reset the error display code, press the **[II]** key (2 times) when the code is displayed (except "R_***").
(All the data on the 1, N, N1, and N2 will be reset)

4-10. Sound Skip Check Result Display Mode

This set can display the count of errors that occurred during the recording/playing for checking.

• Setting method of sound skip check result display mode

1. Set the test mode (see page 12).
2. Press the **[▶]** key or **[REC]** key, and the playing or recording sound skip result display mode becomes active respectively where the LCD displays the following.

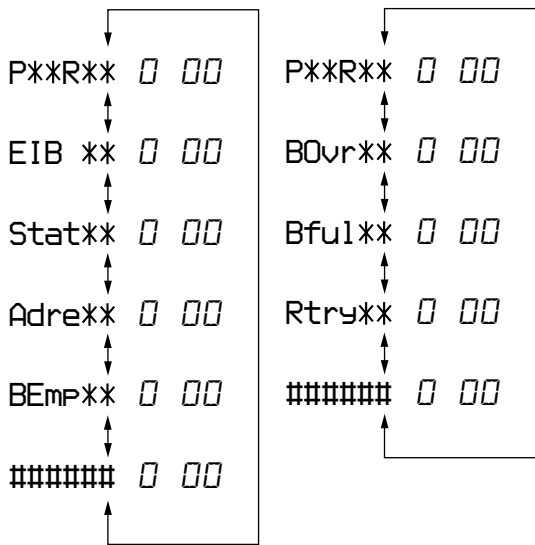
This set LCD display



3. When the **[▶]** key is pressed, total error count is displayed on the LCD, and each time the **[▶▶]** key is pressed, the display item moves down by one as shown below. Also, if the **[◀◀]** key is pressed, the display item moves up by one, then if the **[REC]** key is pressed, the display in the record mode appears. When the **[REC]** key is pressed, total error count is displayed on the LCD, and each time the **[▶▶]** key is pressed, the display item moves down by one as shown below. Also, if the **[◀◀]** key is pressed, the display item moves up by one, then if the **[▶]** key is pressed, the display in the play mode appears.

Playing sound skip result display

Recording sound skip result display



P**R** : Total play/record errors(hex.)
 ** : Counter of sound skip check each item(hex.)
 ##### : 6-digit address where sound was skipped last(hex.)

• Cause of Sound Skip Error

	Cause of error	Description of error
Play	EIB	Sound error correction error
	Stat	Decoder status error
	Adrs	Address access error
	BEmp	Buffer is empty
Record	BOvr	Buffer is full, and sounds were dumped
	Bful	Buffer capacity becomes less, and forcible writing occurred
	Rtry	Retry times over

4. To quit the sound skip check result display mode and to return to the test mode (display check mode), press the **[■]** key.

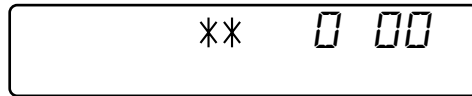
4-11. Key Check Mode

This set can check if the set and remote commander function normally.

• Setting Method of Key Check Mode

1. Setting the test mode (see page 12).
2. Press the **[T MARK]** key for several seconds (about 3 seconds) activates the key check mode. (At the last two digits, AD value of remote commander key line is displayed in hexadecimal)

This set LCD display

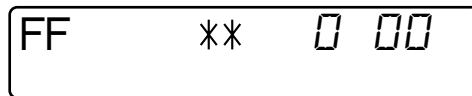


** : AD value of the remote commander Key (hexadecimal 00 to FF)

3. When each key on the set and on remote commander is pressed, its name is displayed on the LCD. (The operated position is displayed for 4 seconds after the slide switch is operated. If any other key is pressed during this display, the remote commander LCD switches to its name display)

Example1: When **[▶▶]** key on the set is pressed:

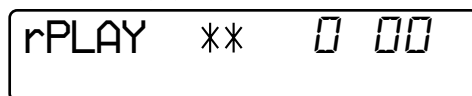
This set LCD display



** : AD value of the remote commander Key (hexadecimal 00 to FF)

Example2: When **[▶▶▶]** key on the remote commander is pressed:

This set LCD display

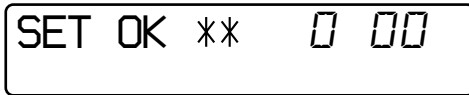


** : AD value of the remote commander Key (hexadecimal 00 to FF)

- When all the keys on the set and on the remote commander are considered as OK, the following displays are shown for 4 seconds.

Example1: When the keys on the set are considered as OK:

This set LCD display



** : AD value of the remote commander Key
(hexadecimal 00 to FF)

Example2: When the keys on the remote commander are considered as OK:

This set LCD display



** : AD value of the remote commander Key
(hexadecimal 00 to FF)

- When all keys were checked or if the upper panel is opened, the key check mode quits and the test mode (display check mode) comes back.

SECTION 5 ELECTRICAL ADJUSTMENTS

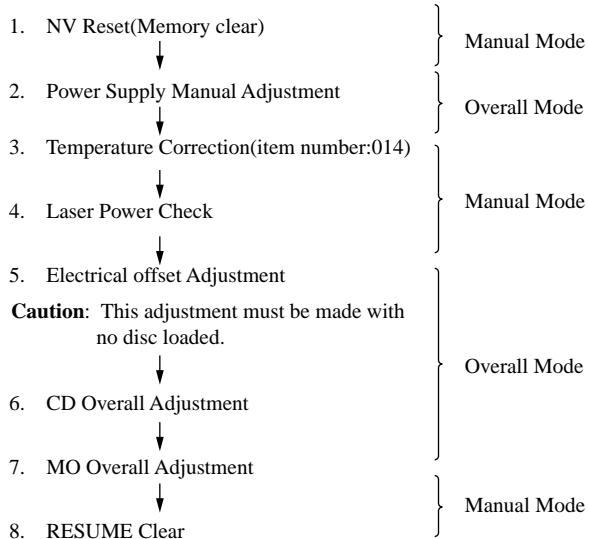
5-1. Outline

- In this set, automatic adjustment of CD and MO can be performed by entering the test mode (see page 12). However, before starting automatic adjustment, the memory clear, power supply adjustment, and laser power check must be performed in the manual mode.
- A key having no particular description in the text, indicates a set key.
- For the LCD display, the LCD display on the set is shown.

5-2. Precautions for Adjustment

1. Adjustment must be done in the test mode only.
After adjusting, release the test mode.
2. Use the following tools and measuring instruments.
 - Test CD disc TDYS-1
(Part No. : 4-963-646-01)
 - SONY MO disc available on the market
 - Digital voltmeter
 - Laser power meter LPM-8001
(Part No. : J-2501-046-A)
 - Thermometer (using the Temperature Correction)
3. Unless specified otherwise, supply DC 3V from the DC IN 3V jack (J601).
4. Switch position
HOLD switch OFF

5-3. Adjustment Sequence



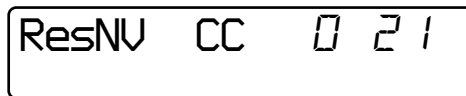
5-4. NV Reset

Caution: On the set having the microcomputer version 1.000, some adjusted values were set in the manual mode at the shipment, but these data will be cleared when the NV is reset. Therefore, on the set having the microcomputer version 1.000, change the adjusted values following the Change of Adjusted Values immediately after the NV was reset.

• Setting method of NV reset

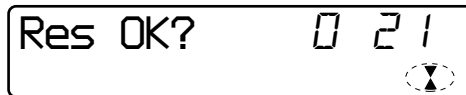
1. Select the manual mode of the test mode, and set item number 021NV Reset (see page 13).

This set LCD display



2. Press the **[]** key.

This set LCD display



3. Press the **[]** key once more.

This set LCD display



NV reset(after several seconds)



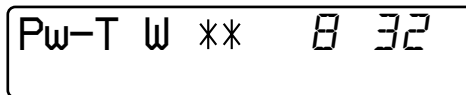
4. Press the **[]** key to quit the manual mode, and activate the test mode (display check mode).

• Change of Adjusted Values

On the set having the microcomputer version 1.000, some adjusted values were set in the manual mode at the shipment, but these data will be cleared when the NV is reset. Therefore, on the set having the microcomputer version 1.000, modify the adjusted values through the following procedure immediately after the NV was reset.

1. Item numbers in which the adjusted values are to be modified
Item number 832
Item number 862
Item number 871
Item number 872
2. Adjusted values modifying procedure
 - 1) Select the manual mode of the test mode, and set item number 832 (see page 13).

This set LCD display

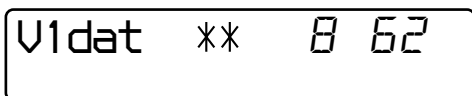


****** : Adjusted value

- 2) Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes E4.

- 3) Press the **[]** key to write the adjusted value.
- 4) Select the manual mode of the test mode, and set item number 862 (see page 13).

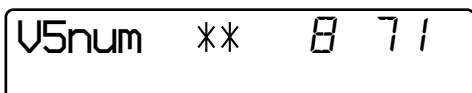
This set LCD display



** : Adjusted value

- 5) Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 01.
- 6) Press the **[]** key to write the adjusted value.
- 7) Select the manual mode of the test mode, and set item number 871 (see page 13).

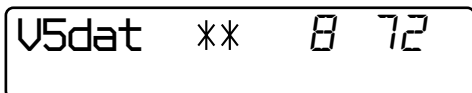
This set LCD display



** : Adjusted value

- 8) Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 20.
- 9) Press the **[]** key to write the adjusted value.
- 10) Select the manual mode of the test mode, and set item number 872 (see page 13).

This set LCD display



** : Adjusted value

- 11) Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 39.
- 12) Press the **[]** key to write the adjusted value.

5-5. Power Supply Manual Adjustment

• Adjustment sequence

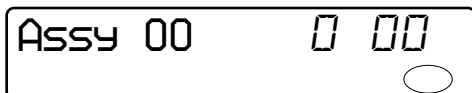
Adjustment must be done with the following steps.

1. Vc PWM Duty (L) adjustment (item number 762)
- ↓
2. Vc PWM Duty (H) adjustment (item number 763)
- ↓
3. V1 PWM Duty adjustment (item number 764)

• Setting method of power supply manual adjustment

1. Make sure that the power supply voltage is 3V.
2. Set the test mode (see page 12).
3. Press the **[]** or **[VOL-]** key to activate the overall adjustment mode.

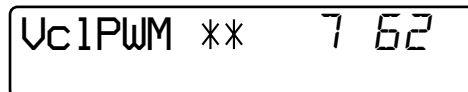
This set LCD display



4. Press the **[END SEARCH]** key. (the **[END SEARCH]** key causes the item number to be switched to 762.)

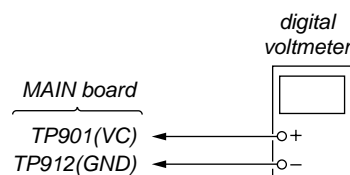
• Adjustment method of Vc PWM Duty (L) (item number: 762)

This set LCD display



** : Adjusted value

1. Connect a digital voltmeter to the TP901 (VC) on the MAIN board, and adjust **[VOL +]** key (voltage up) or **[VOL -]** key (voltage down) so that the voltage becomes G750: 2.50 ± 0.01 V, R700: 2.40 ± 0.01 V.

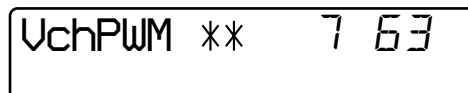


2. Press the **[]** key to write the adjusted value. (The item number changes to 763 when **[]** key is pressed)

Adjustment and Connection Location: MAIN board (see page 21)

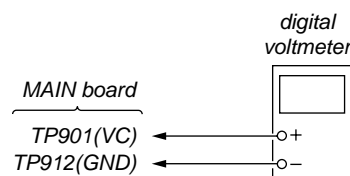
• Adjustment method of Vc PWM Duty (H) (item number: 763)

This set LCD display



** : Adjusted value

1. Connect a digital voltmeter to the TP901 (VC) on the MAIN board, and adjust **[VOL +]** key (voltage up) or **[VOL -]** key (voltage down) so that the voltage becomes G750: 2.50 ± 0.01 V, R700: 2.75 ± 0.01 V.

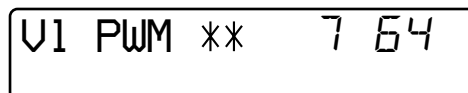


2. Press the **[]** key to write the adjusted value. (The item number changes to 764 when **[]** key is pressed)

Adjustment and Connection Location: MAIN board (see page 21)

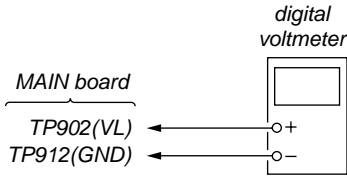
• Adjustment method of V1 PWM Duty (item number: 764)

This set LCD display



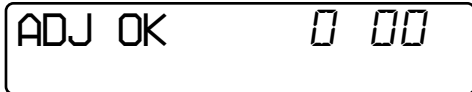
** : Adjusted value

1. Connect a digital voltmeter to the TP902 (VL) on the MAIN board, and adjust [VOL+] key (voltage up) or [VOL-] key (voltage down) so that the voltage becomes 2.30 ± 0.01 V.



2. When press the [] key to write the adjusted value, LCD displays as follows and power supply manual adjustment has completed.

This set LCD display



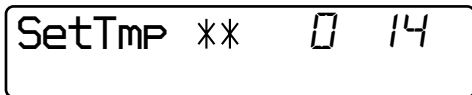
Adjustment and Connection Location: MAIN board

5-6. Temperature Correction

• Adjustment Method of temperature correction

1. Select the manual mode of test mode, and set the mode number 014 (see page 13).

This set LCD display

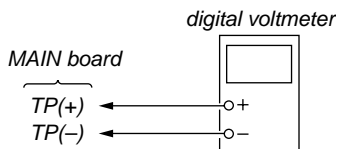
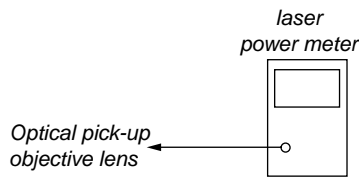


** : Adjusted value

2. Measure the ambient temperature.
3. Adjust with [VOL+], [VOL-] key so that the adjusted value (hexadecimal value) becomes the ambient temperature. (Initial value: 14h = 20 °C, Adjusting range: 80h to 7fh (-128 °C to +127 °C))
4. Press the [] key to write the adjusted value.

5-7. Laser Power Check

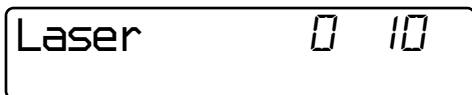
Connection :



Checking Method :

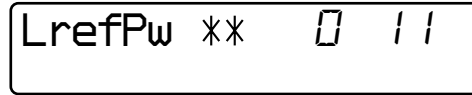
1. Select the manual mode of test mode (see page 13), and set the laser power adjusting mode (item number 010).

This set LCD display



2. Press the [◀] key continuously until the optical pick-up moves to the most inward track.
3. Open the cover and set the laser power meter on the objective lens of the optical pick-up.
4. Press the [▶] key, and set the laser MO read adjustment mode (item number 011).

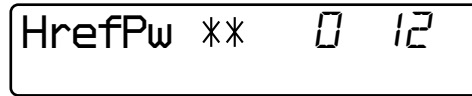
This set LCD display



** : Adjusted value

5. Check that the laser power meter reading is 0.81 ± 0.08 mW.
6. Check that the voltage both ends (TP(+) and TP(-)) of resistor R521 at this time is below 44 mV.
7. Press the [▶] key, and set the laser CD read adjustment mode (item number 012).

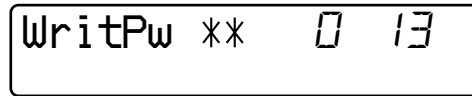
This set LCD display



** : Adjusted value

8. Check that the laser power meter reading is 0.97 ± 0.10 mW.
9. Check that the voltage both ends (TP(+) and TP(-)) of resistor R521 at this time is below 44 mV.
10. Press the [▶] key, and set the laser MO write adjustment mode (item number 013).

This set LCD display

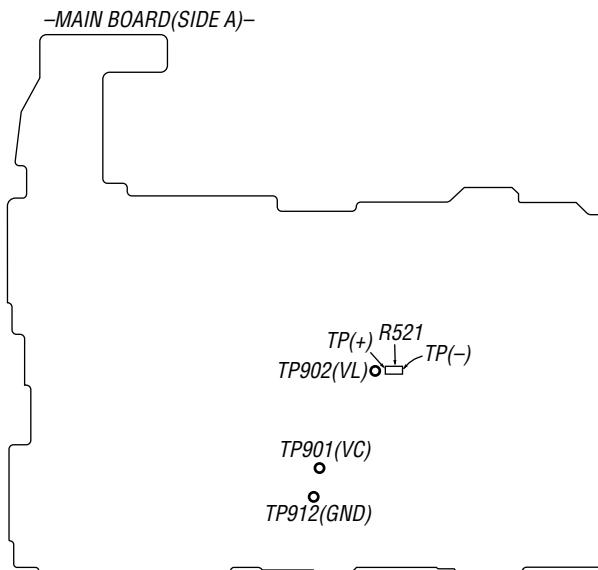


** : Adjusted value

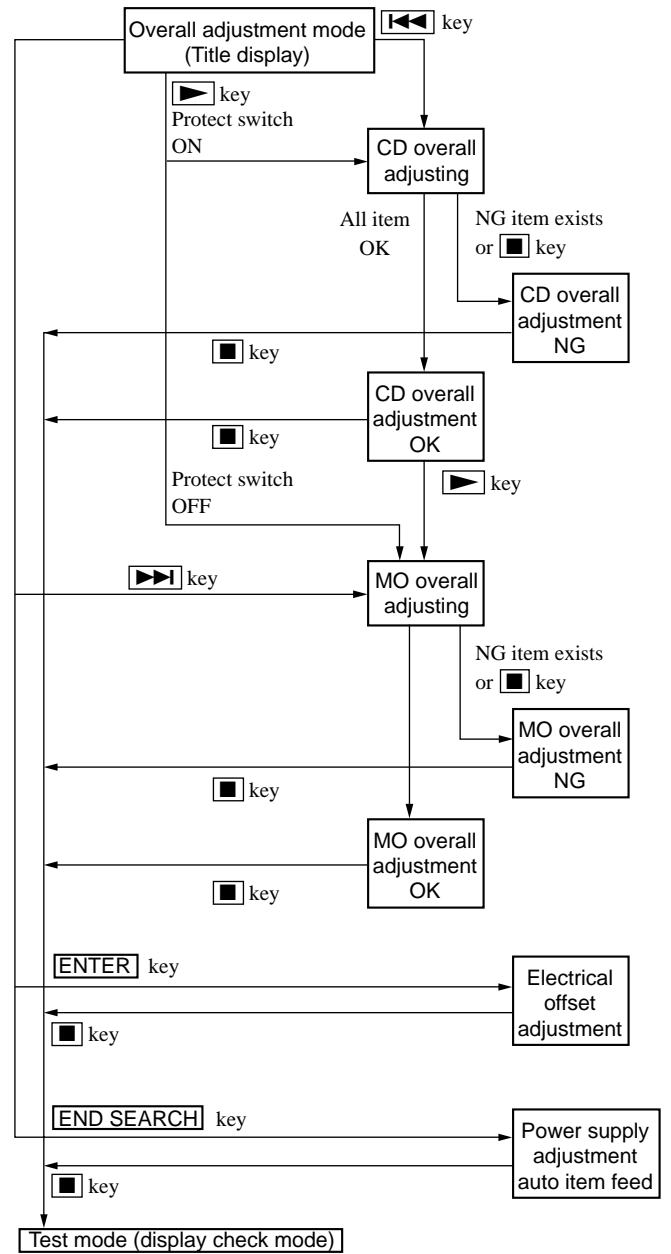
11. Check that the laser power meter reading is 4.95 ± 0.50 mW.
12. Check that the voltage both ends (TP(+) and TP(-)) of resistor R521 at this time is below 80 mV.
13. Press the [] key to quit the manual mode, and activate the test mode (display check mode).

Checking and Connection Location: MAIN board

Adjustment/checking and Connection Location:



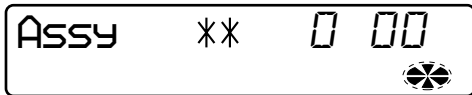
5-8. Overall Adjustment Mode
• Configuration of overall adjustment



Note: Adjust the CD first, when performing adjustment.

• Overall Adjustment Mode (Title Display)

This set LCD display



☼: (Disc mark) At end power supply adjustment:Outside lit
At end of electrical offset adj.:inside lit

Note:On the set having microcomputer version 1.000,the disc mark is displayed on the set LCD only.

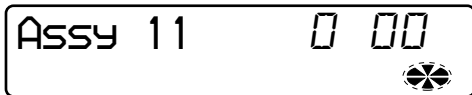
** : Left side = MO overall adjustment information
F* : MO overall adjustment completed
1* : Manual adjustment exists(overall adj.not completed)
0* : Not adjusted
Right side = CD overall adjustment information
F* : CD overall adjustment completed
1* : Manual adjustment exists(overall adj.not completed)
0* : Not adjusted

• Electrical Offset Adjusting Method

Caution: The electrical offset adjustment must be made with no disc loaded.

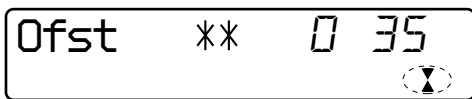
1. Make sure that the power supply voltage is 3V.
2. Set the test mode (see page 12).
3. Press the ◀◀ or [VOL-] key to activate the overall adjustment mode.

This set LCD display



4. Press the [ENTER] key.

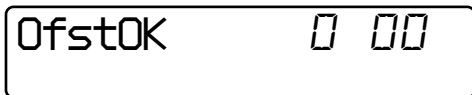
This set LCD display



** : Adjusted value

5. Electrical offset adjustment is over, if the following display appears.

This set LCD display



• Adjustment Method of Overall CD and MO Adjustment Mode

1. Setting the test mode (see page 12).
2. Press the ◀◀ or [VOL-] key activates the overall adjustment mode.

This set LCD display



3. Insert CD disc in the set, and press the ◀◀ key to set the Overall CD Adjustment mode. Automatic adjustments are made.

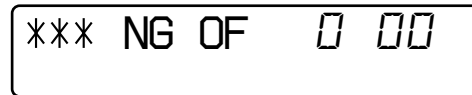
This set LCD display



X XX: Item number for which on adjustment is being executed.

4. In case of CD overall adjustment NG, reset the NV (see page 18), then readjust from the temperature correction (see page 20).

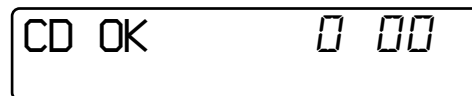
This set LCD display



***: NG item number

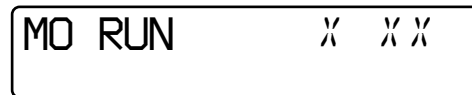
5. If OK through the overall CD adjustments, then perform overall MO adjustments.

This set LCD display



6. Insert MO disc in the set, and press the ▶▶ key to set the Overall MO Adjustment mode. Automatic adjustments are made.

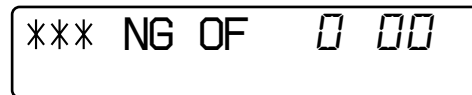
This set LCD display



X XX: Item number for which on adjustment is being executed.

7. In case of MO overall adjustment NG, reset the NV (see page 18), then readjust from the temperature correction (see page 20).

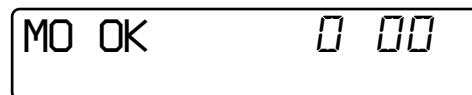
This set LCD display



***: NG item number

8. If OK through the overall MO adjustments, press the [■] key to return to the test mode and terminate the Overall Adjustment mode.

This set LCD display



• Overall CD and MO adjustment items

1. Overall CD adjustment items

Item No.	Description
312	CD electrical offset adjustment
313	
314	
321	CD tracking error gain adjustment
328	CD TWPP gain adjustment
324	CD tracking error offset adjustment
332	
336	CD ABCD gain adjustment
344	CD focus gain adjustment
345	CD tracking gain adjustment
521	CD two-axis sensitivity adjustment
522	

2. Overall MO adjustment items

Item No.	Description
112	MO electrical offset adjustment
113	
114	
118	
221	Low reflective CD tracking error gain adjustment
224	Low reflective CD tracking error offset adjustment
232	
236	Low reflective CD ABCD level adjustment
244	Low reflective CD focus gain adjustment
245	Low reflective CD tracking gain adjustment
121	MO tracking error gain adjustment
122	MO TON offset adjustment
134	MO TWPP gain adjustment
131	MO double speed read TWPP offset adjustment
132	
136	MO ABCD gain adjustment
144	MO focus gain adjustment
145	MO tracking gain adjustment
434	MO write TWPP gain adjustment
431	MO write TWPP offset adjustment
432	MO tracking error offset adjustment
436	MO write ABCD gain adjustment
445	MO write tracking gain adjustment
411	MO normal speed read TWPP offset adjustment
412	MO tracking error offset adjustment
448	20 sec full recording

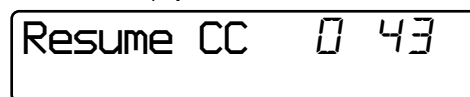
5-9. Resume Clear

Perform the Resume clear when all adjustments completed.

• Resume Clear Setting Method

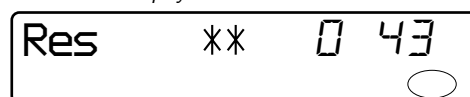
1. Select the manual mode of the test mode, and set item number 043 (see page 13).

This set LCD display

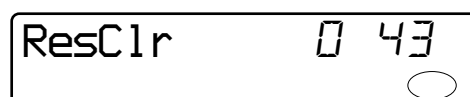


2. Press the key.

This set LCD display



↓
Resume clear complete



3. Press the key to return to the test mode (display check mode).

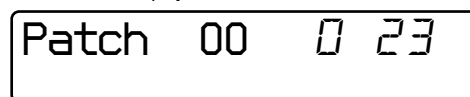
5-10. Patch Data Rewriting When Nonvolatile Memory was Replaced

On this set, if the nonvolatile memory was replaced, the modified program data must be written to the nonvolatile memory. In such a case, write the modified data that meets the microcomputer version following the procedure provided below.

• Modified Data Writing Method (version 1.000)

1. Select the manual mode of the test mode, and set item number 023 (see page 13).

This set LCD display



00: Adjusted value

2. Press the key once to change the adjusted value to 01.
3. Press the key for several seconds (about 3 seconds) to activate the patch data write mode. (The following display will appear where 00 is blinking)

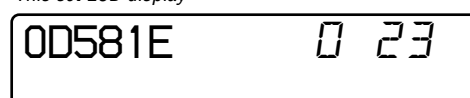
This set LCD display



00: Adjusted value

4. Adjust with the key (adjusted value up) or key (adjusted value down) so that the adjusted value becomes 1E.

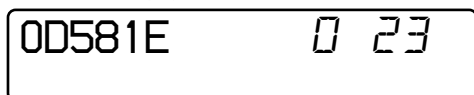
This set LCD display



1E: Adjusted value

5. Press the **[F1]** key.
(0D58 is blinking)

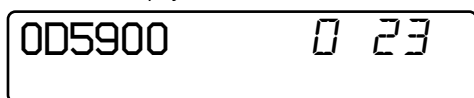
This set LCD display



1E: Adjusted value

6. Press the **[VOL+]** key once to change the blinking portion to 0D59.

This set LCD display

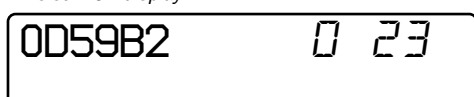


00: Adjusted value

7. Press the **[F1]** key.
(00 is blinking)

8. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes B2.

This set LCD display

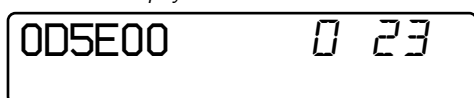


B2: Adjusted value

9. Press the **[F1]** key.
(0D59 is blinking)

10. Press the **[VOL+]** key once to change the blinking portion to 0D5E.

This set LCD display

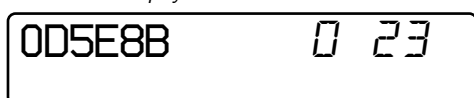


00: Adjusted value

11. Press the **[F1]** key.
(00 is blinking)

12. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 8B.

This set LCD display



8B: Adjusted value

13. Press the **[F1]** key.
(0D5E is blinking)

14. Press the **[VOL+]** key once to change the blinking portion to 0D5F.

This set LCD display



00: Adjusted value

15. Press the **[F1]** key.
(00 is blinking)

16. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 20.

This set LCD display



20: Adjusted value

17. Press the **[F1]** key.
(0D5F is blinking)

18. Press the **[VOL+]** key once to change the blinking portion to 0D60.

This set LCD display

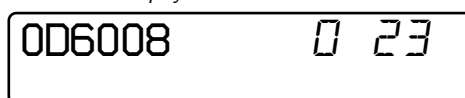


00: Adjusted value

19. Press the **[F1]** key.
(00 is blinking)

20. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 08.

This set LCD display

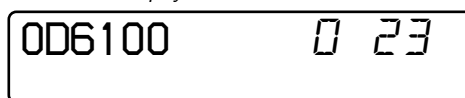


08: Adjusted value

21. Press the **[F1]** key.
(0D60 is blinking)

22. Press the **[VOL+]** key once to change the blinking portion to 0D61.

This set LCD display



00: Adjusted value

23. Press the **[F1]** key.
(00 is blinking)

24. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes A1.

This set LCD display



A1: Adjusted value

25. Press the **[F1]** key.
(0D61 is blinking)

26. Press the **[VOL+]** key once to change the blinking portion to 0D62.

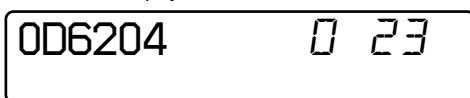
This set LCD display



00: Adjusted value

27. Press the **[■]** key.
(00 is blinking)
28. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 04.

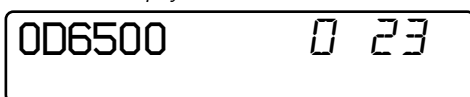
This set LCD display



04: Adjusted value

29. Press the **[■]** key.
(0D62 is blinking)
30. Press the **[VOL+]** key once to change the blinking portion to 0D65.

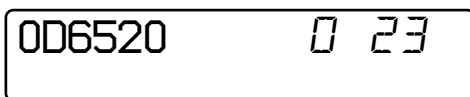
This set LCD display



00: Adjusted value

31. Press the **[■]** key.
(00 is blinking)
32. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 20.

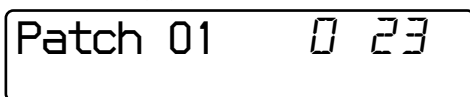
This set LCD display



20: Adjusted value

33. Press the **[■]** key.
(0D65 is blinking)
34. Press the **[T MARK]** key for several seconds (about 3 seconds) to exit the patch data write mode (to return to the manual mode display in the test mode).

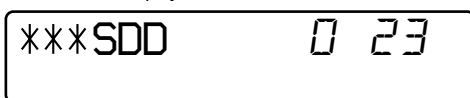
This set LCD display



01: Adjusted value

35. Press the **[■]** key to write the modified data. (The adjusted value changes to CC)
36. The modified data writing is over, if the adjusted value changes to DD.

This set LCD display



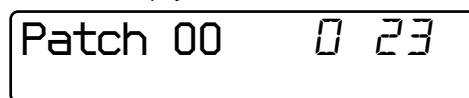
DD: Adjusted value

37. Turn the power off.

• **Modified Data Writing Method (version 1.100)**

1. Select the manual mode of the test mode, and set item number 023 (see page 13).

This set LCD display



00: Adjusted value

2. Press the **[VOL+]** key once to change the adjusted value to 01.
3. Press the **[T MARK]** key for several seconds (about 3 seconds) to activate the patch data write mode.
(The following display will appear where 00 is blinking)

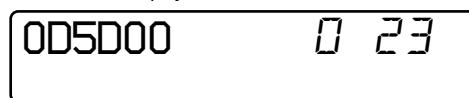
This set LCD display



00: Adjusted value

4. Press the **[■]** key.
(0D5C is blinking)
5. Press the **[VOL+]** key once to change the blinking portion to 0D5D.

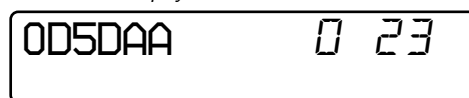
This set LCD display



00: Adjusted value

6. Press the **[■]** key.
(00 is blinking)
7. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes AA.

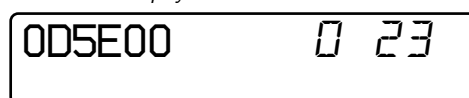
This set LCD display



AA: Adjusted value

8. Press the **[■]** key.
(0D5D is blinking)
9. Press the **[VOL+]** key once to change the blinking portion to 0D5E.

This set LCD display



00: Adjusted value

10. Press the **[■]** key.
(00 is blinking)
11. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 04.

This set LCD display



04: Adjusted value

12. Press the **[F]** key.
(0D5E is blinking)
13. Press the **[VOL+]** key to change the blinking portion to 0D61.

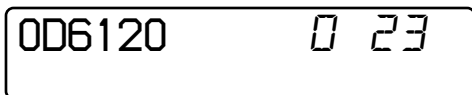
This set LCD display



00: Adjusted value

14. Press the **[M]** key.
(00 is blinking)
15. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 20.

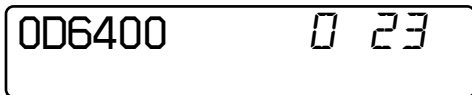
This set LCD display



20: Adjusted value

16. Press the **[F]** key.
(0D61 is blinking)
17. Press the **[VOL+]** key to change the blinking portion to 0D64.

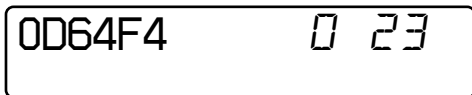
This set LCD display



00: Adjusted value

18. Press the **[M]** key.
(00 is blinking)
19. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes F4.

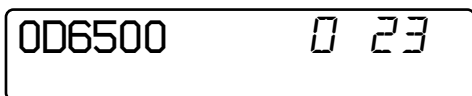
This set LCD display



F4: Adjusted value

20. Press the **[F]** key.
(0D64 is blinking)
21. Press the **[VOL+]** key once to change the blinking portion to 0D65.

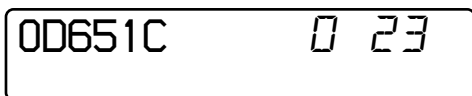
This set LCD display



00: Adjusted value

22. Press the **[M]** key.
(00 is blinking)
23. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 1C.

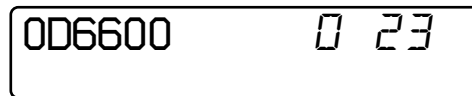
This set LCD display



1C: Adjusted value

24. Press the **[F]** key.
(0D65 is blinking)
25. Press the **[VOL+]** key once to change the blinking portion to 0D66.

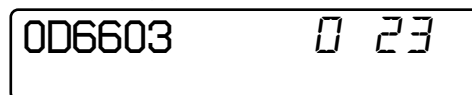
This set LCD display



00: Adjusted value

26. Press the **[M]** key.
(00 is blinking)
27. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 03.

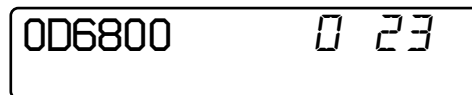
This set LCD display



03: Adjusted value

28. Press the **[F]** key.
(0D66 is blinking)
29. Press the **[VOL+]** key to change the blinking portion to 0D68.

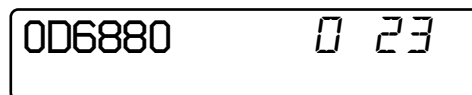
This set LCD display



00: Adjusted value

30. Press the **[M]** key.
(00 is blinking)
31. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 80.

This set LCD display



80: Adjusted value

32. Press the **[F]** key.
(0D68 is blinking)
33. Press the **[VOL+]** key once to change the blinking portion to 0D69.

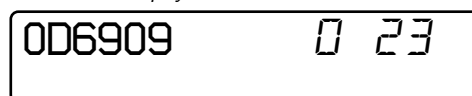
This set LCD display



00: Adjusted value

34. Press the **[M]** key.
(00 is blinking)
35. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 09.

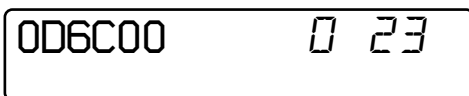
This set LCD display



09: Adjusted value

36. Press the **[H]** key.
(0D69 is blinking)
37. Press the **[VOL+]** key to change the blinking portion to 0D6C.

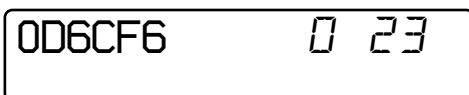
This set LCD display



00: Adjusted value

38. Press the **[M]** key.
(00 is blinking)
39. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes F6.

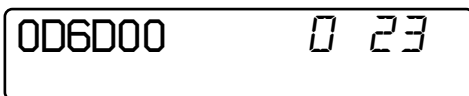
This set LCD display



F6: Adjusted value

40. Press the **[H]** key.
(0D6C is blinking)
41. Press the **[VOL+]** key once to change the blinking portion to 0D6D.

This set LCD display



00: Adjusted value

42. Press the **[M]** key.
(00 is blinking)
43. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 1C.

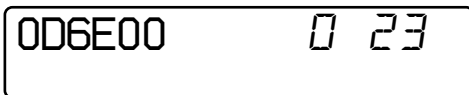
This set LCD display



1C: Adjusted value

44. Press the **[H]** key.
(0D6D is blinking)
45. Press the **[VOL+]** key once to change the blinking portion to 0D6E.

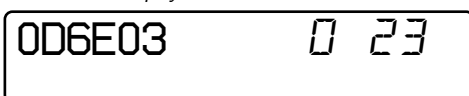
This set LCD display



00: Adjusted value

46. Press the **[M]** key.
(00 is blinking)
47. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 03.

This set LCD display



03: Adjusted value

48. Press the **[H]** key.
(0D6E is blinking)
49. Press the **[VOL+]** key to change the blinking portion to 0D72.

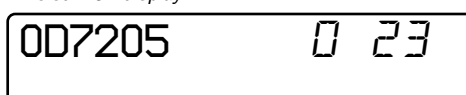
This set LCD display



00: Adjusted value

50. Press the **[M]** key.
(00 is blinking)
51. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 05.

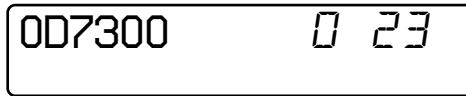
This set LCD display



05: Adjusted value

52. Press the **[H]** key.
(0D72 is blinking)
53. Press the **[VOL+]** key once to change the blinking portion to 0D73.

This set LCD display



00: Adjusted value

54. Press the **[M]** key.
(00 is blinking)
55. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 03.

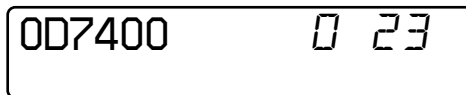
This set LCD display



03: Adjusted value

56. Press the **[H]** key.
(0D73 is blinking)
57. Press the **[VOL+]** key once to change the blinking portion to 0D74.

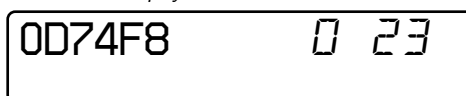
This set LCD display



00: Adjusted value

58. Press the **[M]** key.
(00 is blinking)
59. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes F8.

This set LCD display



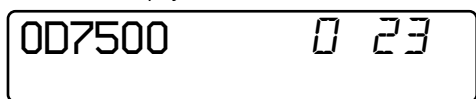
F8: Adjusted value

60. Press the **[]** key.

(0D65 is blinking)

61. Press the **[VOL+]** key once to change the blinking portion to 0D75.

This set LCD display



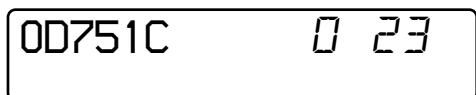
00: Adjusted value

62. Press the **[]** key.

(00 is blinking)

63. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 1C.

This set LCD display



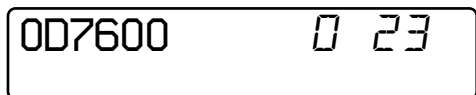
1C: Adjusted value

64. Press the **[]** key.

(0D75 is blinking)

65. Press the **[VOL+]** key once to change the blinking portion to 0D76.

This set LCD display



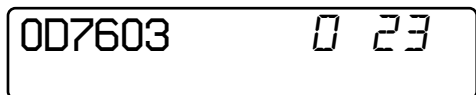
00: Adjusted value

66. Press the **[]** key.

(00 is blinking)

67. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 03.

This set LCD display



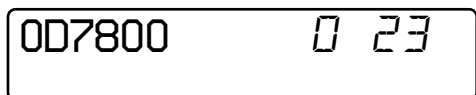
03: Adjusted value

68. Press the **[]** key.

(0D76 is blinking)

69. Press the **[VOL+]** key to change the blinking portion to 0D78.

This set LCD display



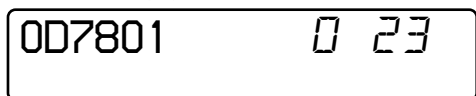
00: Adjusted value

70. Press the **[]** key.

(00 is blinking)

71. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes 01.

This set LCD display



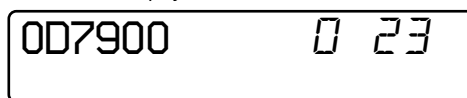
01: Adjusted value

72. Press the **[]** key.

(0D78 is blinking)

73. Press the **[VOL+]** key once to change the blinking portion to 0D79.

This set LCD display



00: Adjusted value

74. Press the **[]** key.

(00 is blinking)

75. Adjust with the **[VOL+]** key (adjusted value up) or **[VOL-]** key (adjusted value down) so that the adjusted value becomes E0.

This set LCD display



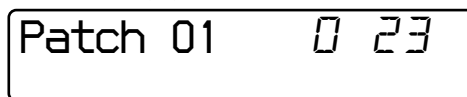
E0: Adjusted value

76. Press the **[]** key.

(0D79 is blinking)

77. Press the **[T MARK]** key for several seconds (about 3 seconds) to exit the patch data write mode (to return to the manual mode display in the test mode).

This set LCD display

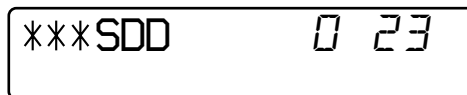


01: Adjusted value

78. Press the **[]** key to write the modified data. (The adjusted value changes to CC)

79. The modified data writing is over, if the adjusted value changes to DD.

This set LCD display



DD: Adjusted value

80. Turn the power off.

SECTION 6 DIAGRAMS

6-1. IC PIN FUNCTION DESCRIPTION

• IC501 SN761057DBT (RF AMP, FOCUS/TRACKING ERROR AMP)

Pin No.	Pin Name	I/O	Description
1	TE	O	Tracking error signal output to the system controller (IC801)
2	REXT	—	Connect terminal to the external resistor for ADIP amp control
3	WPPLPF	—	Connect terminal to the external capacitor for TPP/WPP low-pass filter
4	VREF	O	Reference voltage output terminal (+1 V)
5	C	I	Signal (C) input from the optical pickup detector
6	D	I	Signal (D) input from the optical pickup detector
7	D-C	I	Signal (D) input from the optical pickup detector (AC input)
8	IY	I	I-V converted RF signal (IY) input from the optical pickup detector
9	IX	I	I-V converted RF signal (IX) input from the optical pickup detector
10	JX	I	I-V converted RF signal (JX) input from the optical pickup detector
11	JY	I	I-V converted RF signal (JY) input from the optical pickup detector
12	A	I	Signal (A) input from the optical pickup detector
13	A-C	I	Signal (A) input from the optical pickup detector (AC input)
14	B	I	Signal (B) input from the optical pickup detector
15	TON-C	—	Connect terminal to the external capacitor for TON hold
16	CIG	—	Connect terminal to the external capacitor for the low-pass filter of NPP divider denominator
17	CDN	—	Connect terminal to the external capacitor for the low-pass filter of CSL divider denominator
18	PD-I	I	Light amount monitor input terminal (invert input)
19	PD-NI	I	Light amount monitor input terminal (non-invert input)
20	PD-O	O	Light amount monitor output terminal
21	ADIP	O	ADIP duplex FM signal (22.05 kHz \pm 1 kHz) output to the system controller (IC801)
22	DVDD	—	Power supply terminal (+2.3 V) (digital system)
23	SBUS	I/O	SSB serial data input/output with the system controller (IC801)
24	SCK	I	SSB serial clock signal input from the system controller (IC801)
25	XRST	I	Reset signal input from the system controller (IC801) “L”: reset
26	OFTRK	I	Off track signal input from the system controller (IC801)
27	DGND	—	Ground terminal (digital system)
28	BOTM	O	Bottom hold signal output of the light amount signal (RF/ABCD) to the system controller (IC801)
29	PEAK	O	Peak hold signal output of the light amount signal (RF/ABCD) to the system controller (IC801)
30	VREF075	—	Connect terminal to the external capacitor for the internal reference voltage
31	VC	O	Middle point voltage (+1.2 V) generation output terminal
32	CCSL2	—	Connect terminal to the external capacitor for TPP/WPP low-pass filter
33	RF OUT	O	Playback EFM RF signal output to the system controller (IC801)
34	AGND	—	Ground terminal (analog system)
35 – 37	EQ, LP, PS	—	Connect terminal to the external capacitor for the RF equalizer
38	AVCC	—	Power supply terminal (analog system) (+2.3 V)
39, 40	OFC-2, OFC-1	—	Connect terminal to the external capacitor for RF AC coupling
41	ABCD	O	Light amount signal (ABCD) output to the system controller (IC801)
42	FE	O	Focus error signal output to the system controller (IC801)
43	S-MON	O	Servo signal monitor output to the system controller (IC801)
44	ADIP-IN	I	ADIP duplex FM signal (22.05 kHz \pm 1 kHz) input terminal

• IC801 CXD2671-203GA (SYSTEM CONTROLLER, DIGITAL SIGNAL PROCESSOR, 16M BIT D-RAM)

Pin No.	Pin Name	I/O	Description
1	PAUSE KEY	I	Set key input terminal (■ key input)
2	MIC SENSE	O	Control signal output to the microphone amp “H”: HIGH, “L”: LOW, normally: “H” (Not used)
3	XTEST	I	Input terminal for the test mode set up “L”: test mode (normally fixed at “H”)
4, 5	NC	O	Not used (open)
6	MCUVDD0	—	Power supply terminal (for microcomputer block) (+1.5 V)
7	MIFVSS3	—	Ground terminal (for microcomputer I/F)
8	XRST	I	System reset signal input terminal from the power control (IC901) “L”: reset
9	S MON	I	Servo signal monitor input terminal (A/D input) from RF amp (IC501)
10	VB MON	I	Voltage monitor input terminal of UNREG power supply (A/D input)
11	CHG MON	I	Charge voltage monitor input terminal (A/D input) from XPC18A22FCR2 (IC601)
12	VREF MON	I	Clear reference voltage input terminal (A/D input) from RF amp (IC501)
13, 14	SET KEY 1, SET KEY 2	I	Set key input terminal (A/D input)
15	VL MON	I	VL voltage monitor input terminal (A/D input) (G750 only)
16	HIDC MON	I	HIGH DC voltage monitor input terminal (A/D input)
17	WK DET	I	Set key start switching detection signal input terminal (A/D input)
18	REC KEY	I	REC key input terminal (A/D input)
19	HALF LOCK SW	I	Open button detection switch (S805) input terminal (A/D input) “L”: when normal position, “H”: when locked
20	RMC KEY	I	Key input terminal (A/D input) of the remote commander attached headphone
21	AVDD	—	Power supply terminal (for the analog circuit block) (+2.8 V)
22	AVSS	—	Ground terminal (for the analog circuit block)
23	VDIOSC	—	Power supply terminal (for OSC cell) (+2.4 V)
24	OSCI	I	System clock (45.1584 MHz) input terminal
25	OSCO	O	System clock (45.1584 MHz) output terminal
26	VSIOSC	—	Ground terminal (for OSC cell)
27	DAVDD	—	Power supply terminal (for the built-in D/A converter) (+2.4 V)
28	VREFL	I	Reference voltage input terminal (for the internal D/A converter L-CH)
29	AOUTL	O	Built-in D/A converter (L-CH) output terminal
30	AOUTR	O	Built-in D/A converter (R-CH) output terminal
31	VREFR	I	Reference voltage input terminal (for the built-in D/A converter R-CH)
32	DAVSS	—	Ground terminal (for the built-in D/A converter)
33	ASYO	O	Playback EFM duplex signal output terminal
34	ASYI	I	Playback EFM comparison slice level input terminal
35	AVD1	—	Ground terminal (for the analog) (+2.4 V)
36	BIAS	I	Bias input for the playback EFM comparison
37	RFI	I	Playback EFM RF signal input from RF amp (IC501)
38	AVS1	—	Ground terminal (for the analog)
39	PCO	O	Phase comparison output for the master clock of playback EFM system master PLL
40	PDO	O	Phase comparison output for the analog PLL Not used (open)
41	FILI	I	Filter input for the master clock of the playback EFM system master PLL
42	FILO	O	Filter output for the master clock of the playback EFM system master PLL
43	CLTV	I	Internal VCO control voltage input for the playback EFM system master PLL
44	PEAK	I	Peak hold signal input of the light amount signal (RF/ABCD) from RF amp (IC501)
45	BOTM	I	Bottom hold signal input of the light amount signal (RF/ABCD) from RF amp (IC501)
46	ABCD	I	Light amount signal (ABCD) input from RF amp (IC501)
47	FE	I	Focus error signal input from RF amp (IC501)
48	AUX1	I	Support signal (I3 signal/temperature signal) input terminal (A/D input)
49	VC	I	Middle point voltage (+1.2 V) input terminal
50	ADIO	O	Monitor output of A/D converter input signal Not used (open)
51	ADRT	I	A/D converter the upper limit voltage input (fixed at “H” in this set)

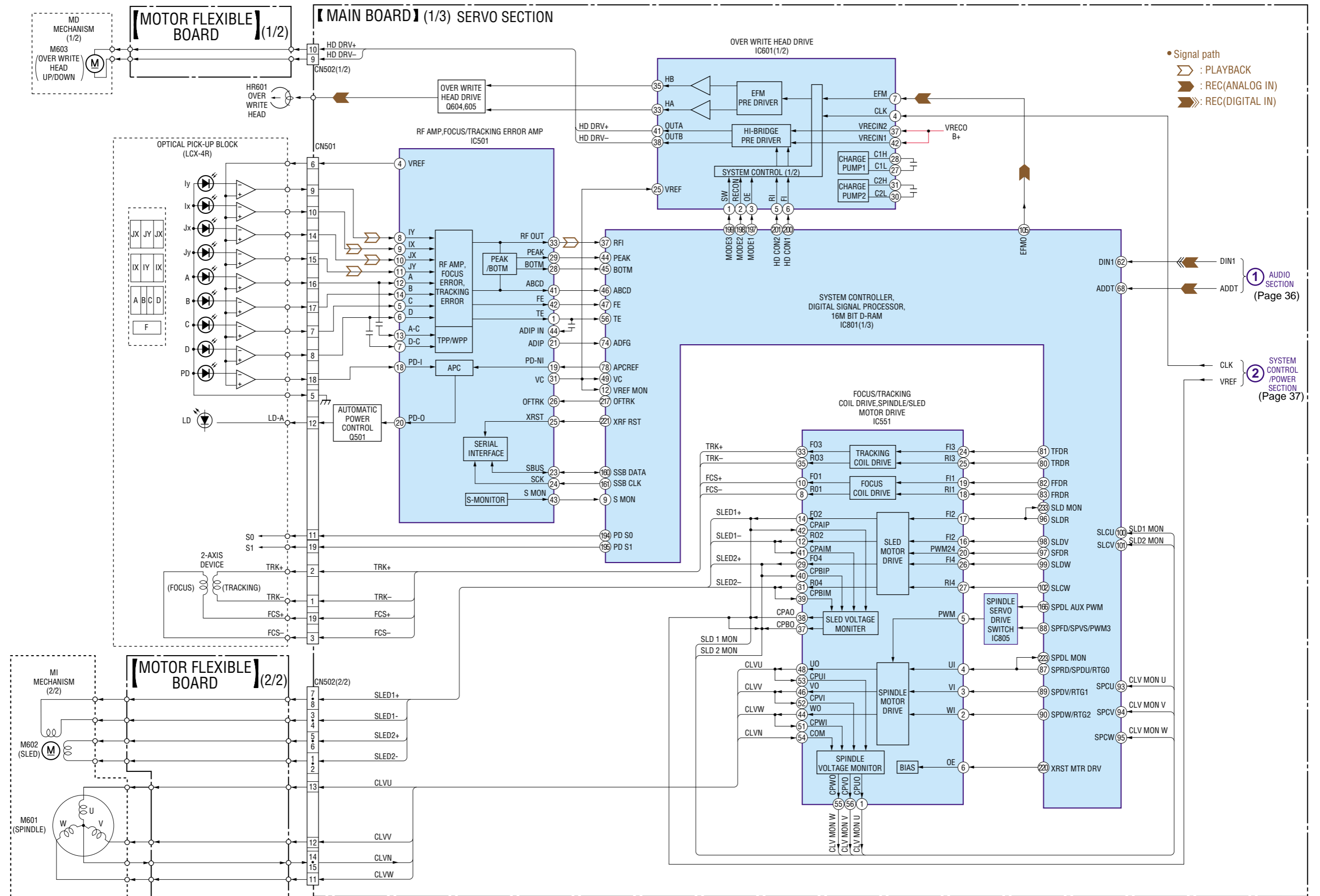
Pin No.	Pin Name	I/O	Description
52	AVD2	—	Power supply terminal (for the analog) (+2.4 V)
53	AVS2	—	Ground terminal (for the analog)
54	ADRB	I	A/D converter the lower limit voltage input (fixed at “L” in this set)
55	SE	I	Sled error signal input terminal Not used (fixed at “L”)
56	TE	I	Tracking error signal input from RF amp (IC501)
57	DCHG	—	Connecting analog power supply of the low impedance (fixed at “H” in this set)
58	APC	I	Error signal input for the laser automatic power control Not used (fixed at “H”)
59	DSPVDD0	—	Power supply terminal (for DSP block) (+1.5 V)
60	DSPVSS0	—	Ground terminal (for DSP block)
61	XTSL	I	Input terminal for the frequency set up of the system clock “L”: 45.1584 MHz, “H”: 22.5792 MHz (fixed at “L” in this set)
62	DIN1	I	Input terminal of the record system digital audio signal
63	DOUT	O	Output terminal of the playback system digital audio signal Not used (open)
64	DAPWMLP	O	D/A converter PWM output (L-CH right phase) Not used (open)
65	DAPWMLN	O	D/A converter PWM output (L-CH reverse phase) Not used (open)
66	DAPWMRP	O	D/A converter PWM output (R-CH right phase) Not used (open)
67	DADT	O	Audio data output Not used (open)
68	ADDT	I	Data signal input from the external A/D converter (IC301)
69	LRCK	O	L/R sampling block signal (44.1 kHz) output to the external A/D converter (IC301)
70	XBCK	O	Bit clock signal (2.8224 MHz) output to the external A/D converter (IC301)
71	FS256	O	11.2896 MHz clock signal output to the external A/D converter (IC301)
72	MVCI	I	Vibrate input for the digital in PLL from the external VCO Not used (fixed at “L”)
73	DSPVDD1	—	Power supply terminal (for DSP block) (+1.5 V)
74	ADFG	I	ADIP duplex FM signal (20.05 ± 1 kHz) input from RF amp (IC501)
75	F0CNT	O	Filter cut off control signal output Not used
76	DIFVDD0	—	Power supply terminal (for DSP I/F) (+2.3 V)
77	DIFVSS0	—	Ground terminal (for DSP I/F)
78	APCREF	O	Control signal output to the reference voltage generation circuit for the laser automatic power control
79	LDDR	O	PWM signal output for the laser automatic power control Not used (open)
80	TRDR	O	Tracking servo drive PWM signal output (–) to the motor driver (IC551)
81	TFDR	O	Tracking servo drive PWM signal output (+) to the motor driver (IC551)
82	FFDR	O	Focus servo drive PWM signal output (+) to the motor driver (IC551)
83	FRDR	O	Focus servo drive PWM signal output (–) to the motor driver (IC551)
84	MCUVDD1	—	Power supply terminal (for the microcomputer block) (+1.5 V)
85	FGIN	I	FG signal input terminal for the spindle servo Not used (open)
86	FS4	O	176.4 MHz clock signal output to the power control (IC601, IC901)
87	SPRD/SPDU/RTG0	O	Spindle servo drive PWM signal output terminal (–) to the motor driver (IC551)
88	SPFD/SPVS/PWM3	O	Spindle servo drive PWM signal output (+)
89	SPDV/RTG1	O	Spindle motor drive control signal output (V)/RTG output 1 to the motor driver (IC551)
90	SPDW/RTG2	O	Spindle motor drive control signal output (W)/RTG output 2 to the motor driver (IC551)
91	DSPVDD2	—	Power supply terminal (for DSP block) (+1.5 V)
92	DSPVSS1	—	Ground terminal (for DSP block)
93	SPCU	I	Spindle motor drive comparison signal input (U) from the motor driver (IC551)
94	SPCV	I	Spindle motor drive comparison signal input (V) from the motor driver (IC551)
95	SPCW	I	Spindle motor drive comparison signal input (W) from the motor driver (IC551)
96	SRDR	O	Sled servo drive PWM signal output (–) to the motor driver (IC551)
97	SFDR	O	Sled servo drive PWM signal output (+) to the motor driver (IC551)
98	SLDV	O	Sled motor drive signal output (V) to the motor driver (IC551)/drive control signal output (1–)

Pin No.	Pin Name	I/O	Description
99	SLDW	O	Sled motor drive signal output (W) to the motor driver (IC551)/drive control signal output (2+)
100	SLCU	I	Spindle motor drive comparison signal input (U) from the motor driver (IC551)
101	SLCV	I	Spindle motor drive comparison signal input (V) from the motor driver (IC551)
102	SLCW	I	Spindle motor drive comparison signal input (W) from the motor driver (IC551)
103	DIFVDD1	—	Power supply terminal (for DSP I/F) (+2.3 V)
104	DIFVSS1	—	Ground terminal (for DSP I/F)
105	EFMO	O	EFM encode data output for the record to the over write head drive (IC601)
106	MNT0	O	Internal DSP monitor output (0) terminal Not used (open)
107	MNT1	O	Internal DSP monitor output (1) terminal Not used (open)
108	MNT2	O	Internal DSP monitor output (2) terminal Not used (open)
109	MNT3	O	Internal DSP monitor output (3) terminal Not used (open)
110	SENSE	O	Internal DSP (SENS) monitor output terminal Not used (open)
111	TX	O	Record data output enable signal output monitor terminal of the internal DSP Not used (open)
112	RECP	O	Laser power changeover signal output monitor terminal Not used (open)
113	DAPVDD3	—	Power supply terminal (for DSP block) (+1.5 V)
114 – 117	NC	O	Output terminal for the external D-RAM Not used (open)
118	DRAMVSS0	—	Ground terminal (for the external D-RAM)
119	DRAMVDD0	—	Power supply terminal (for the external D-RAM) (+2.4 V)
120 – 138	NC	O	Output terminal for the external D-RAM Not used (open)
139	DRAMVDD1	—	Power supply terminal (for the external D-RAM) (+2.4 V)
140	DRAMVSS1	—	Ground terminal (for the external D-RAM)
141	TSB MST VDD	—	Power supply terminal (for TSB master communication) (+2.8 V)
142	RMC DTCK	I/O	TSB serial data input/output with the remote commander attached headphone
143	TSB SLV VDD	—	Power supply terminal (for I/F to TSB slave communication) (+2.3 V)
144	TSB SLVI	I	TSB slave signal input from the remote commander attached headphone (fixed at “L”)
145	(TSB SLVO)	O	TSB slave signal output from the remote commander attached headphone Not used (open)
146	TDI	I	Data input terminal for JTAG Not used (open)
147	TMS	I	Test mode control input terminal for JTAG Not used (open)
148	TCK	I	Clock input terminal for JTAG Not used (open)
149	XTRST	I	Reset input terminal for JTAG Not used (open)
150	TDO	O	Data output terminal for JTAG Not used (open)
151	JTAGVDD	—	Power supply terminal (for JTAG) (+2.4 V)
152	JTAGVSS	—	Ground terminal (for JTAG)
153	MCUVDD2	—	Power supply terminal (for the microcomputer block) (+1.5 V)
154	MIFVDD0	—	Power supply terminal (for the microcomputer I/F block) (+2.3 V)
155	MIFVSS0	—	Ground terminal (for the microcomputer I/F block)
156, 157	TEST1, TEST0	I	Input terminal for the main test (normally fixed at “L”)
158	EVA	I	EVA/FLASH chip discrimination terminal “L”: FLASH chip, “H”: EVA chip
159	(OPR LED)	O	Not used (open)
160	SSB DATA	I/O	Input/output of SSB serial data with RF amp (IC501)
161	SSB CLK	O	SSB serial clock output to RF amp (IC501)
162	MCUVSS0	—	Ground terminal (for the microcomputer block)
163	VREC PWM	O	Over write head control spare terminal Not used (open)
164	VL PWM	O	PWM for the laser automatic power supply voltage control signal output to the power control (IC901)
165	VC PWM	O	PWM signal output for the system power supply voltage control to the power control (IC901)
166	SPDL AUX PWM	O	PWM signal output for the spindle support to the motor driver (IC551)
167, 168	NC	O	Not used (open)
169	CLK SEL	O	System clock select signal output to the power control (IC901)

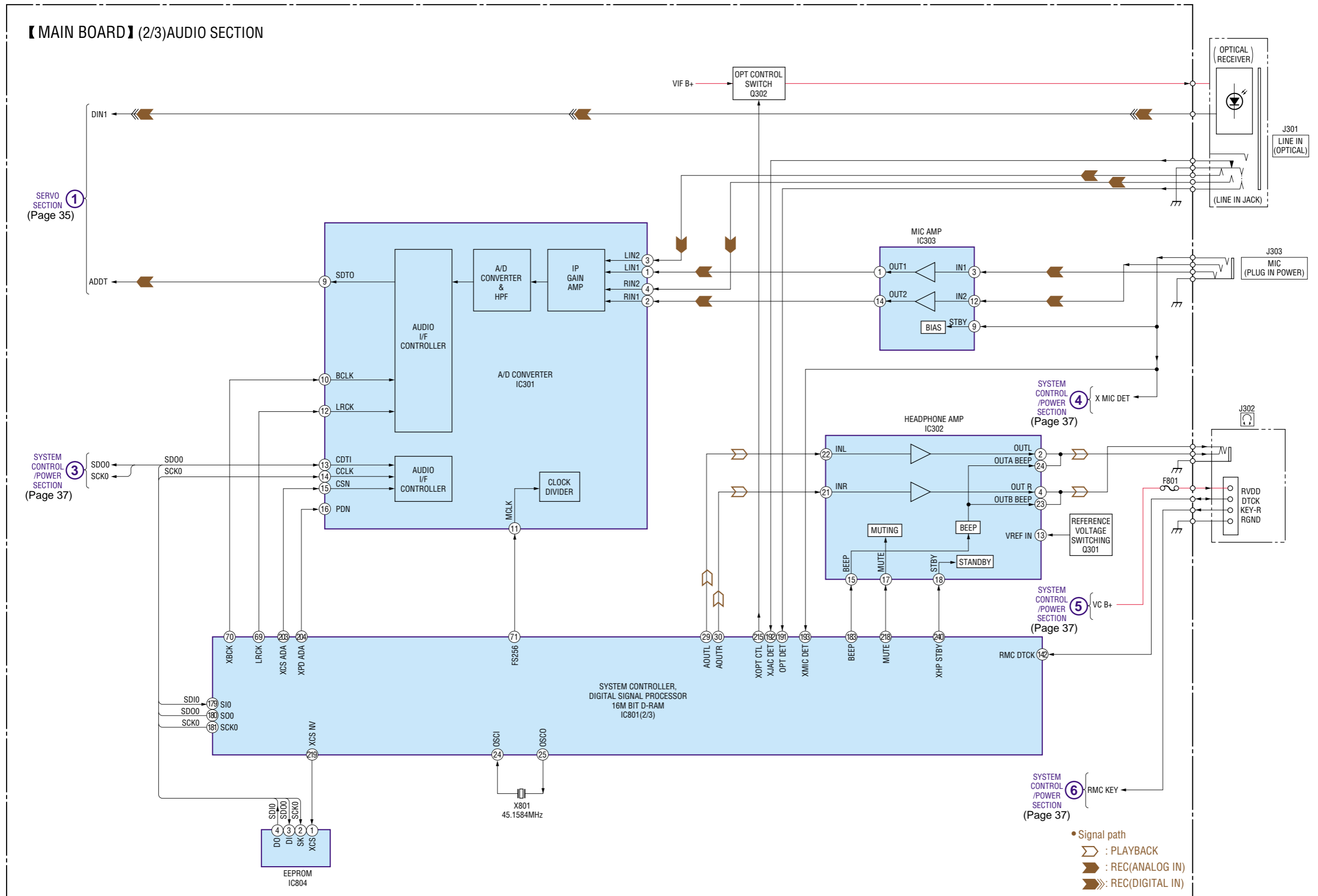
Pin No.	Pin Name	I/O	Description
170	OPEN CLOSE SW	I	Open/close detection switch (S806) of the upper panel input terminal (A/D input) “L”: when upper panel close
171	GND SW	O	Control signal output to the ground (GND) changeover switch
172, 173	SET CODE0, 1	O	Input terminal for the set (fixed at “L” in this set)
174	SET CODE2	O	Input terminal for the set (open in this set)
175	SET CODE3	O	Input terminal for the set (fixed at “L” in this set)
176	MIFVDD1	—	Power supply terminal (for the microcomputer I/F block) (+2.3 V)
177	MIFVSS1	—	Ground terminal (for the microcomputer I/F block)
178	(AOUT SEL)	O	HP/LINE changeover signal output Not used (open)
179	SI0	I	Serial data input from the nonvolatile memory (IC804) and liquid crystal display element module
180	SO0	O	Serial data output to the nonvolatile memory (IC804), A/D converter (IC301) and liquid crystal display element module
181	SCK0	O	Serial clock signal output to the nonvolatile memory (IC804), A/D converter (IC301) and liquid crystal display element module
182	XGUM ON	I	Battery pack detection switch input terminal for the charge “L”: there is battery pack for the charge Not used (open)
183	BEEP	O	Beep sound control signal output to the headphone amp (IC302)
184	NC	O	Not used (open)
185	VD SEL	O	VD power supply changeover signal output terminal Not used (open)
186	(XMUTE)	O	Analog muting control signal output terminal “L”: muting ON Not used (open)
187	LCD RST AUX	O	Reset control signal output terminal to the liquid crystal display element “L”: reset
188, 189	NC	O	Not used (open)
190	XPATCH	I	Patch function detection input terminal “L”: patch function Fixed at “L” in this set
191	OPT DET	I	DIN plug detection signal input terminal
192	XJACK DET	I	LINE IN plug detection signal input terminal
193	XMIC DET	I	Microphone plug detection signal input terminal
194, 195	PD S0, PD S1	O	PD IC mode changeover signal output to the optical pick up
196	MIFVDD2	—	Power supply terminal (for the microcomputer I/F block) (+2.3 V)
197 – 199	MODE1 – 3	O	Power supply control signal output (for the over write head drive) to the over write head drive (IC601)
200, 201	HD CON 1, 2	O	Over write head control signal output to the over write head drive (IC601)
202	REC WBL SW	O	LPF changeover switch input terminal when REC/PB control Not used (open)
203	XCS ADA	O	Chip select signal output to A/D converter (IC301)
204	XPD ADA	O	Power supply control signal output for the drive to A/D converter (IC301)
205	XCS LCD	O	Chip select signal output to the liquid crystal display element
206	LCD STB	O	Strobe signal output to the the liquid crystal display element
207	LCD RST	O	Reset control signal output to the liquid crystal display element Not used (open)
208	REC LED	O	LED ON/OFF control signal output for REC display Not used (open)
209	LD ON	O	ON/OFF control signal output terminal of the laser diode Not used (open)
210	TSB SLV CHK	I	TSB slave detection signal input terminal
211, 212	NC	I	Not used (open)
213	MCUVSS1	—	Ground terminal (for the microcomputer block)
214	CAV CLV SW	O	CAV/CLV changeover control signal output Not used (open)
215	XOPT CTL	O	Power supply ON/OFF control signal output for DIN PD drive
216	(CS RTC)	O	Chip select signal output to the clock IC Not used (open)
217	OFTRK	I	Off track signal input from RF amp (IC501)
218	MUTE	O	Analog muting control signal output “H”: muting ON
219	XCS NV	O	Chip select signal output to EEPROM (IC804)
220	XRST MTR DRV	O	Reset control signal output to the motor driver (IC551)
221	XRF RST	O	Reset control signal output to RF amp (IC501)
222	MCUVDD3	—	Power supply terminal (for the microcomputer block) (+1.5 V)
223	SPDL MON	I	Spindle servo monitor signal input from the motor driver (IC551)

Pin No.	Pin Name	I/O	Description
224 – 226	(XAVLS), (SOUND 1, 2)	I	Not used (open)
227	XHOLD SW	I	HOLD switch input terminal “L”: hold ON, “H”: hold OFF
228	(SYCN REC)	I	SYNCHRO REC switch input terminal “L”: OFF, “H”: ON Not used (open)
229	NC	O	Not used (open)
230	PROTECT	I	Detection input terminal of the record check claw from the protect detection switch (S803) “L”: recording possible condition, “H”: protect
231	FLASHVDD	—	Power supply terminal (for the internal FLASH ROM) (+2.4 V)
232	FLASHVSS	—	Ground terminal (for the internal FLASH ROM)
233	SLD MON	I	Sled servo monitor signal input from the motor driver (IC551)
234	VLON	O	Power supply control signal output for the laser diode drive to the power control (IC901)
235	SLEEP	O	System sleep control signal output to the power control (IC901) “H”: sleep ON
236	FFCLR	O	Input latch output for the start switching to the power control (IC901)
237	CHG GAIN	O	Charge gain control signal output to the power control (IC601)
238	CHG	O	Charge ON/OFF control signal output to the power control (IC601) “H”: charge ON
239	(TUN REG ON)	O	Not used (open)
240	XHP STBY	O	Headphone standby signal output to the headphone amp (IC302)
241	MIFVDD3	—	Power supply terminal (for the microcomputer I/F block) (+2.3 V)
242	MIFVSS2	—	Ground terminal (for the microcomputer I/F block)
243	TEST2	O	Input terminal for the main test (normally open)
244	NC	—	Not used (open)

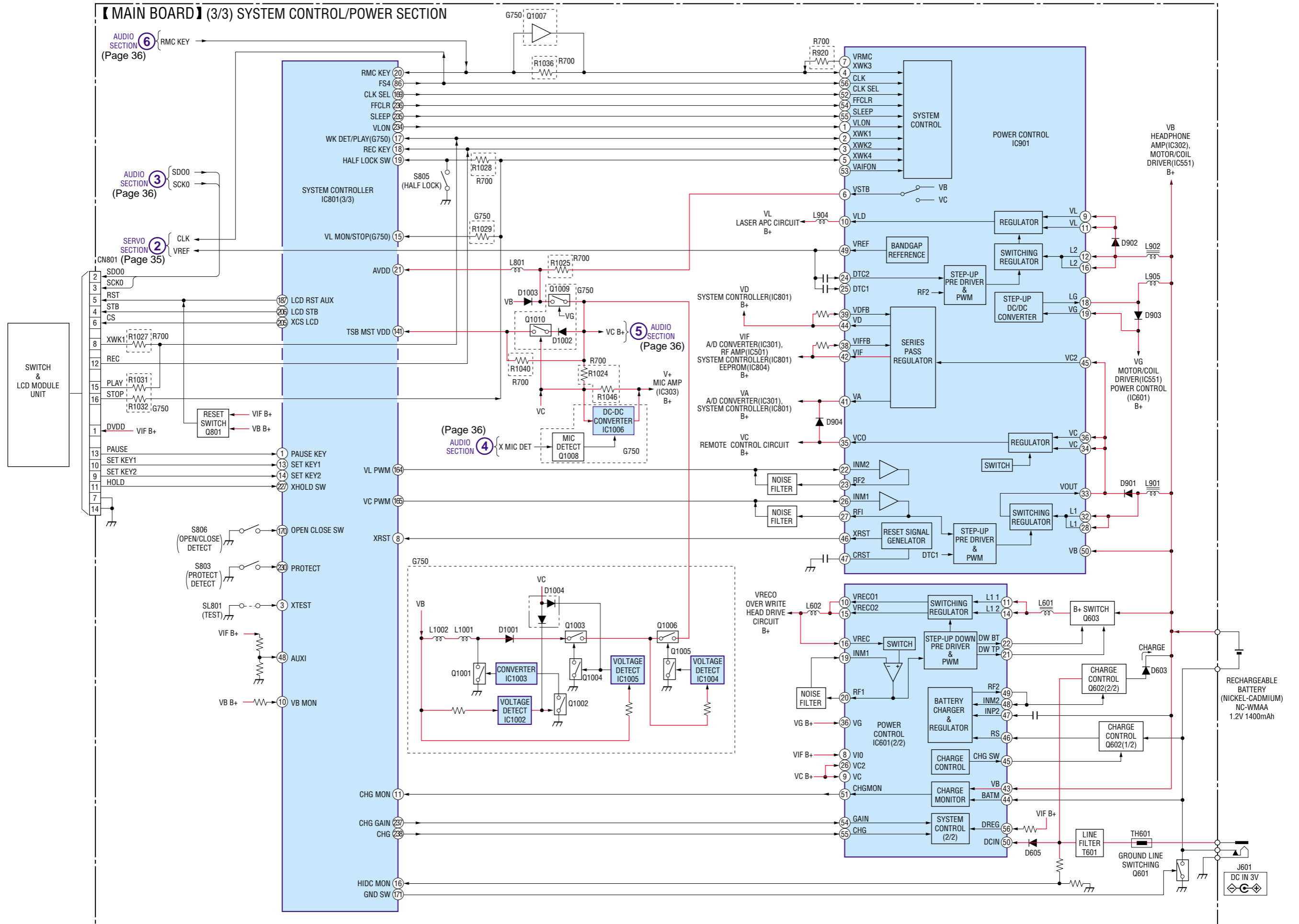
6-2. BLOCK DIAGRAM — SERVO SECTION —



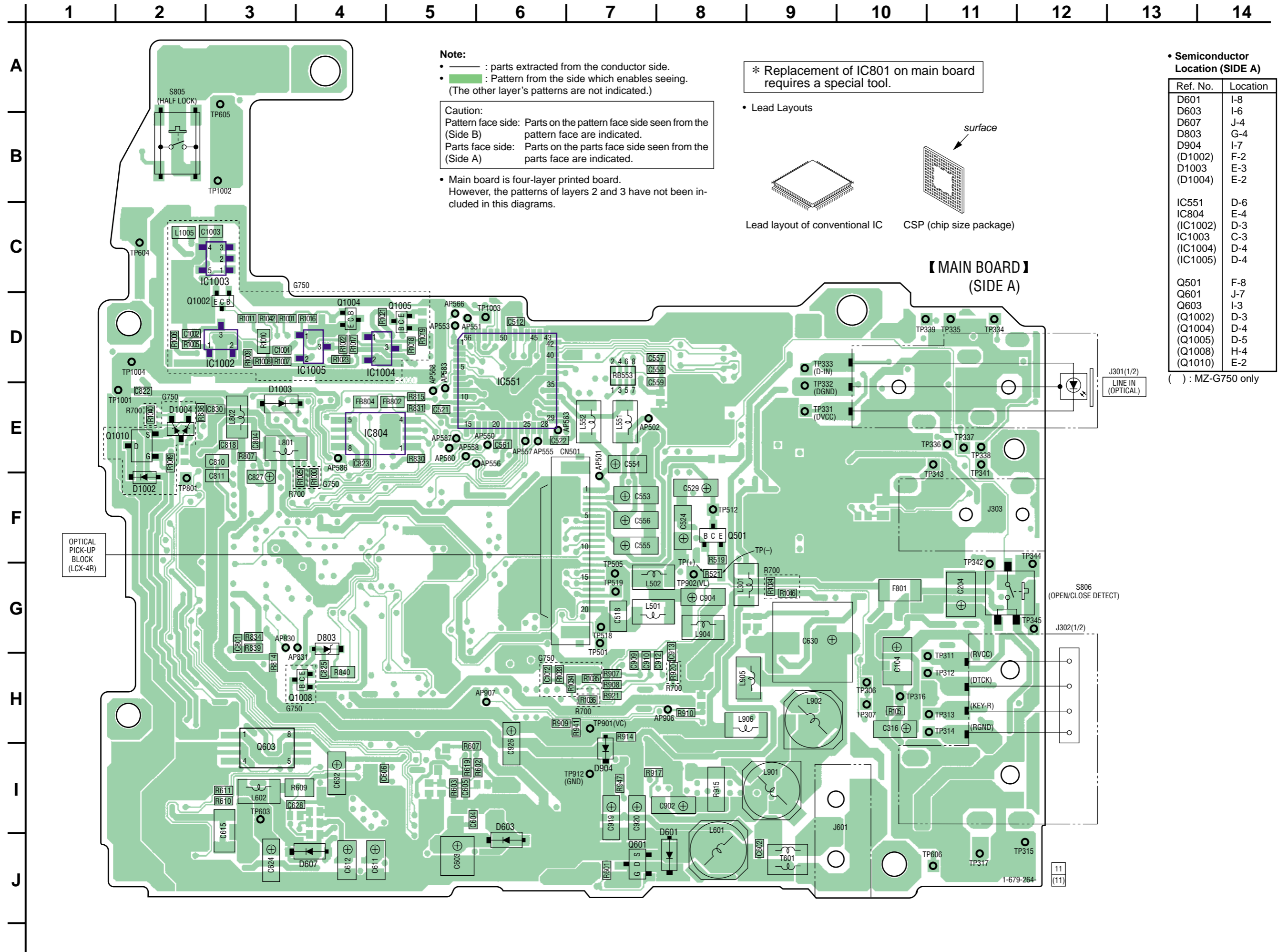
6-3. BLOCK DIAGRAM — AUDIO SECTION —



6-4. BLOCK DIAGRAM — SYSTEM CONTROL / POWER SECTION —



6-5. PRINTED WIRING BOARD — MAIN SECTION —



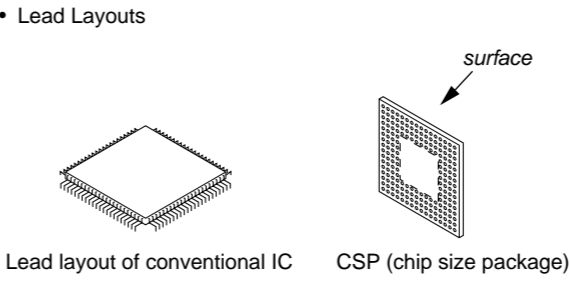
Note:

- : parts extracted from the conductor side.
- : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

Caution:
 Pattern face side: Parts on the pattern face side seen from the (Side B) pattern face are indicated.
 Parts face side: Parts on the parts face side seen from the (Side A) parts face are indicated.

• Main board is four-layer printed board. However, the patterns of layers 2 and 3 have not been included in this diagrams.

* Replacement of IC801 on main board requires a special tool.



• Semiconductor Location (SIDE A)

Ref. No.	Location
D601	I-8
D603	I-6
D607	J-4
D803	G-4
D904	I-7
(D1002)	F-2
D1003	E-3
(D1004)	E-2
IC551	D-6
IC804	E-4
(IC1002)	D-3
IC1003	C-3
(IC1004)	D-4
(IC1005)	D-4
Q501	F-8
Q601	J-7
Q603	I-3
(Q1002)	D-3
(Q1004)	D-4
(Q1005)	D-5
(Q1008)	H-4
(Q1010)	E-2

() : MZ-G750 only

OPTICAL PICK-UP BLOCK (LCX-4R)

S806 (OPEN/CLOSE DETECT)

J302(1/2)

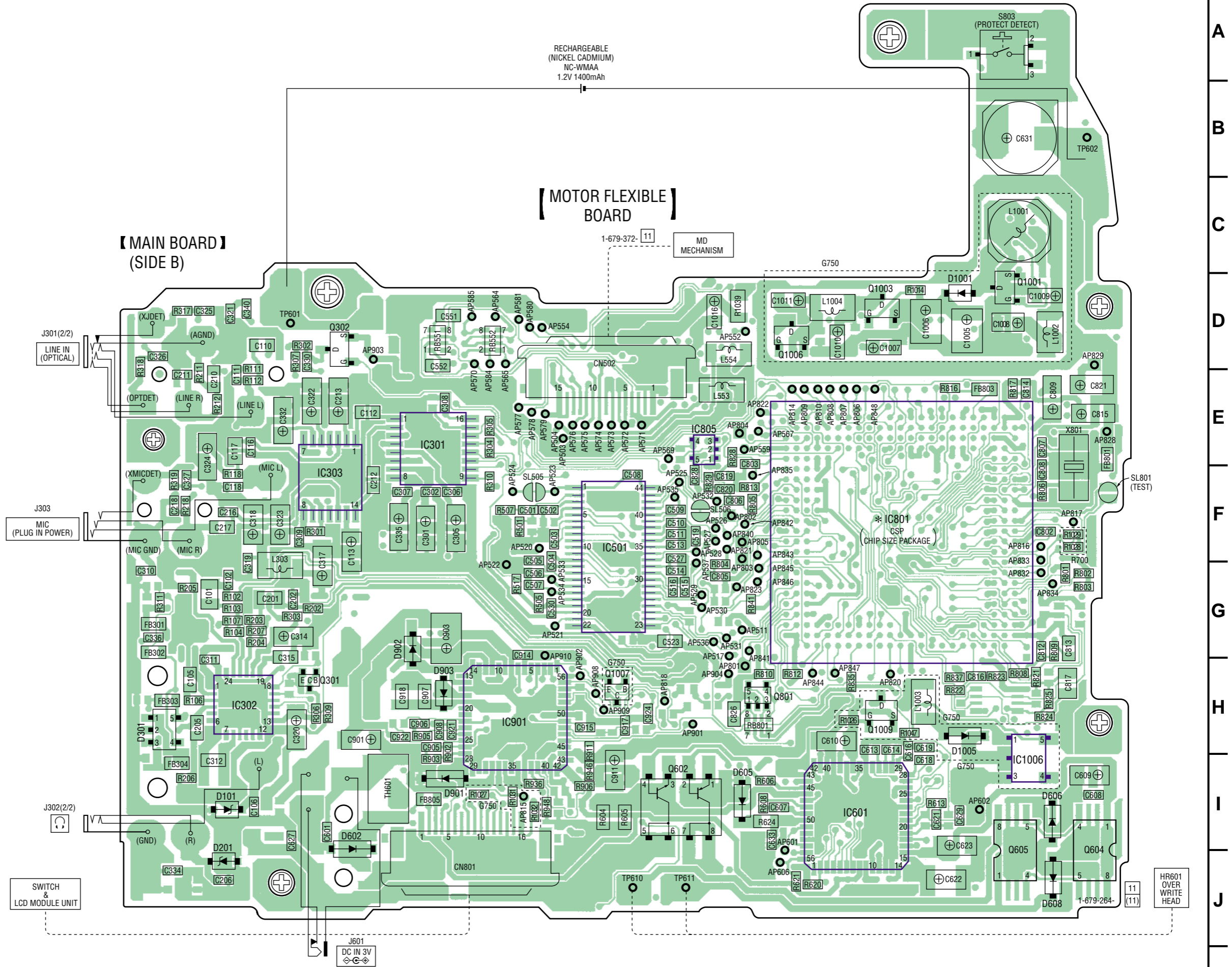
11 (11)

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

• Semiconductor Location (SIDE B)

Ref. No.	Location
D101	I-11
D201	J-11
D301	H-12
D602	I-9
D605	I-5
D606	I-2
D608	J-2
D901	I-8
D902	G-9
D903	H-8
(D1001)	D-3
(D1005)	H-3
IC301	E-9
IC302	H-11
IC303	F-10
IC501	F-7
IC601	I-4
IC801	F-4
IC805	E-6
IC901	H-8
(IC1006)	I-2
Q301	H-10
Q302	D-10
Q602	I-6
Q604	I-2
Q605	I-2
Q801	H-5
(Q1001)	C-3
(Q1003)	D-4
(Q1006)	D-5
(Q1007)	H-7
(Q1009)	H-4

() : MZ-G750 only



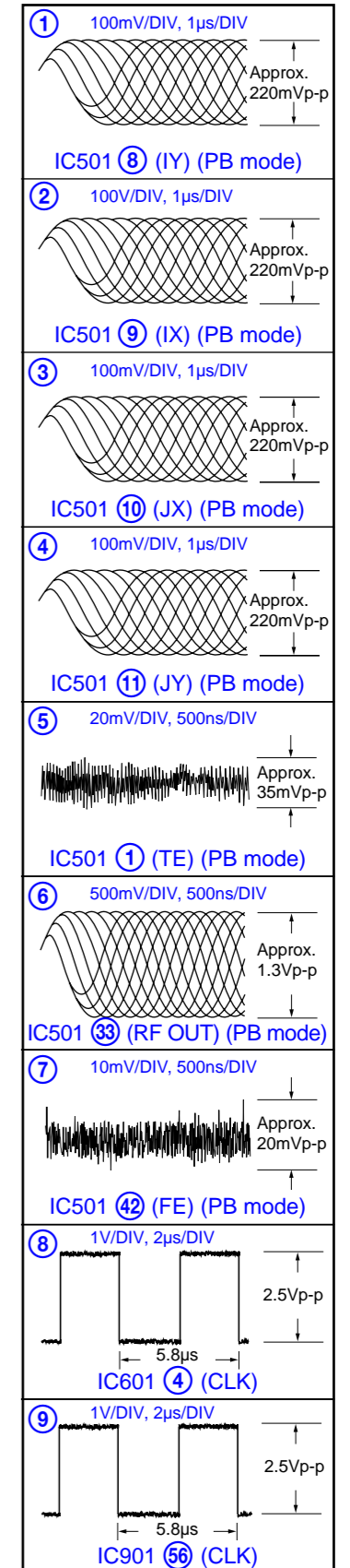
Common note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF : μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4 \text{ W}$ or less unless otherwise specified.
- % : indicates tolerance.
- : panel designation.

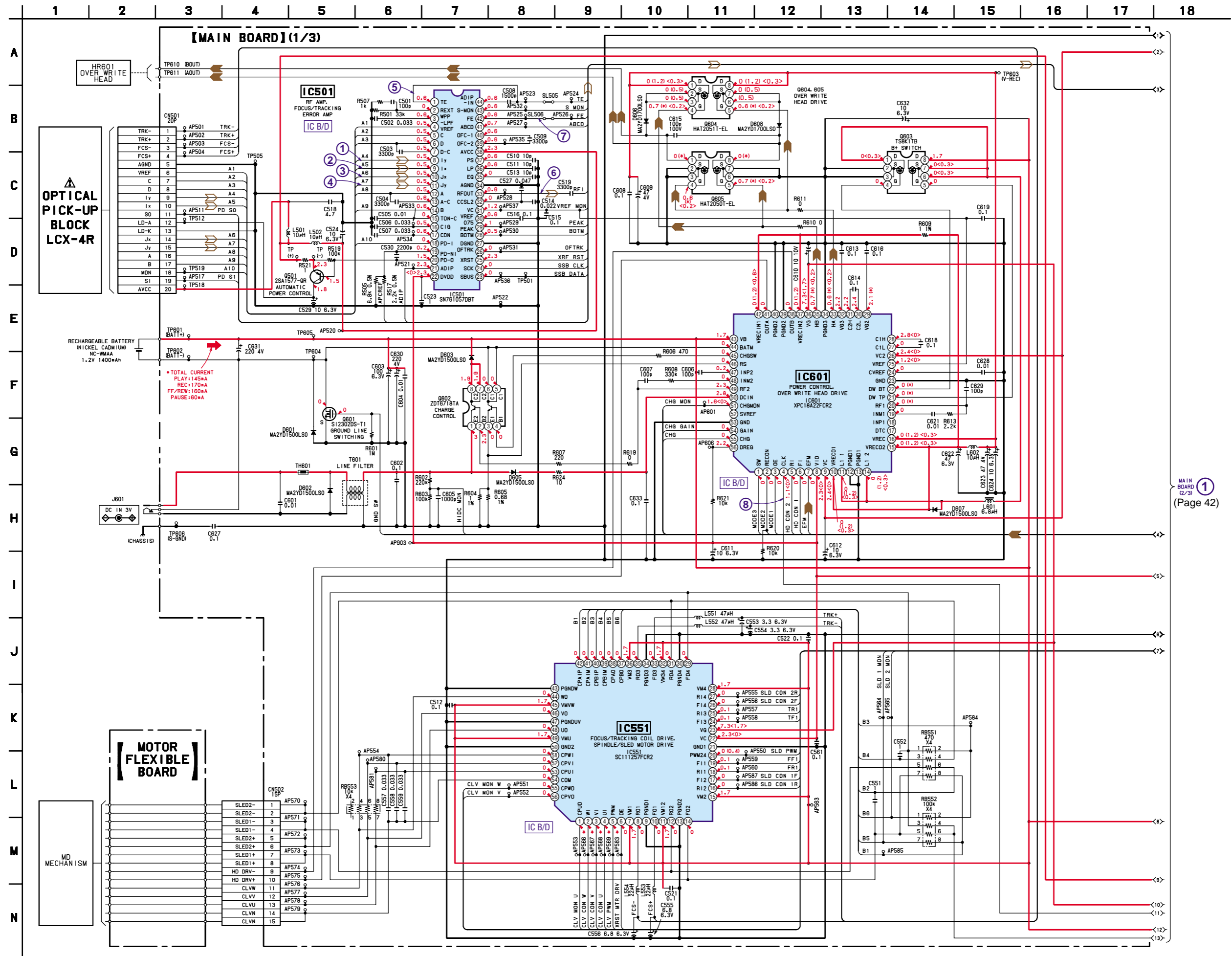
Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

- — : B+ Line.
- Total current is measured with Minidisc installed.
- Power voltage is dc 3V and fed with regulated dc power supply from external power voltage jack.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark : PB
- () : REC
- < > : TUNER
- * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 $\text{M}\Omega$). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- : PB
- ▶▶ : REC (ANALOG)
- ▶▶▶ : REC (DIGITAL)

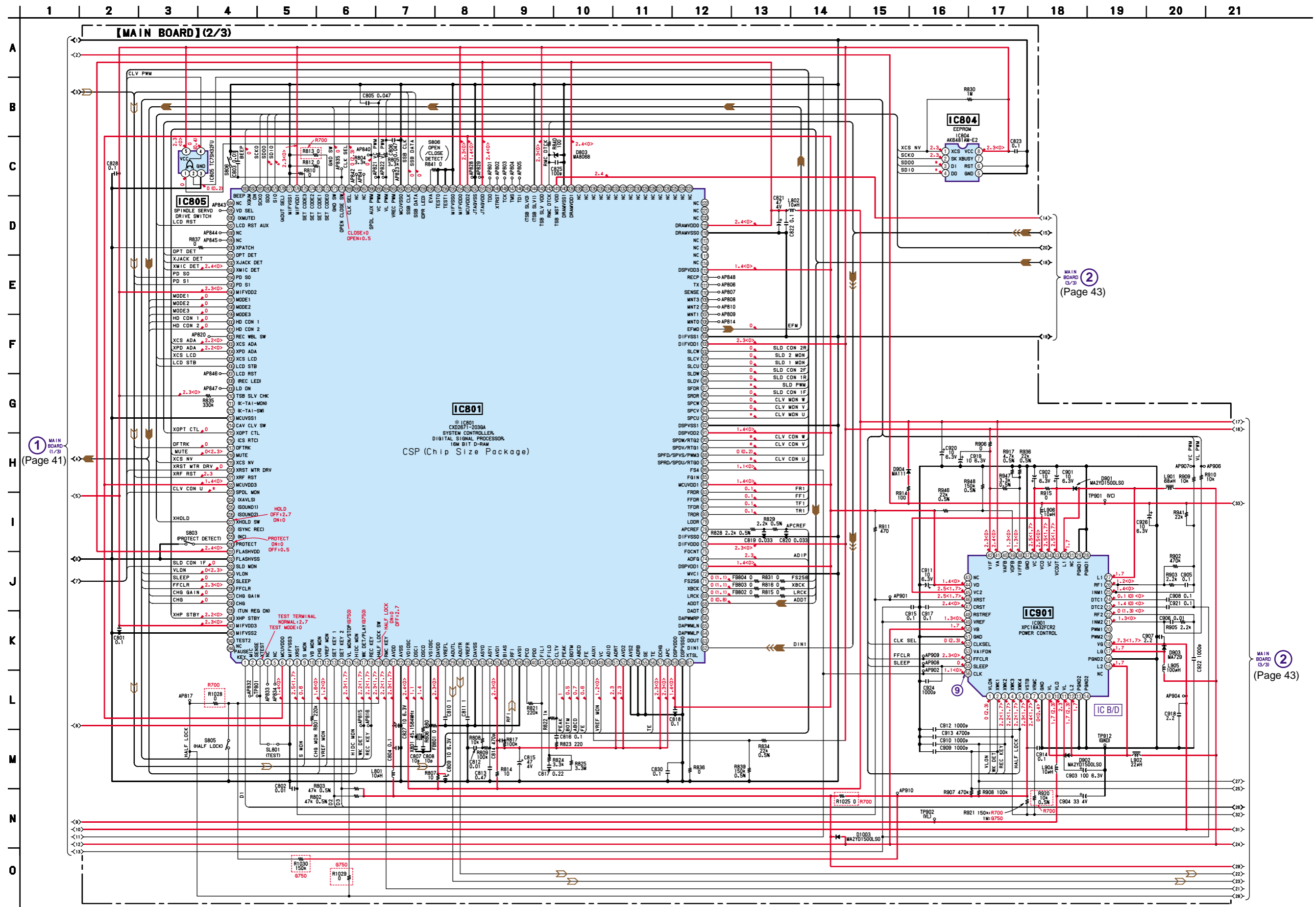
• Waveforms



6-6. SCHEMATIC DIAGRAM — MAIN SECTION (1/3) — • Refer to page 40 for Waveforms. Refer to page 44 for IC Block Diagrams.



6-7. SCHEMATIC DIAGRAM — MAIN SECTION (2/3) — • Refer to page 40 for Waveforms. Refer to page 44 for IC Block Diagrams.

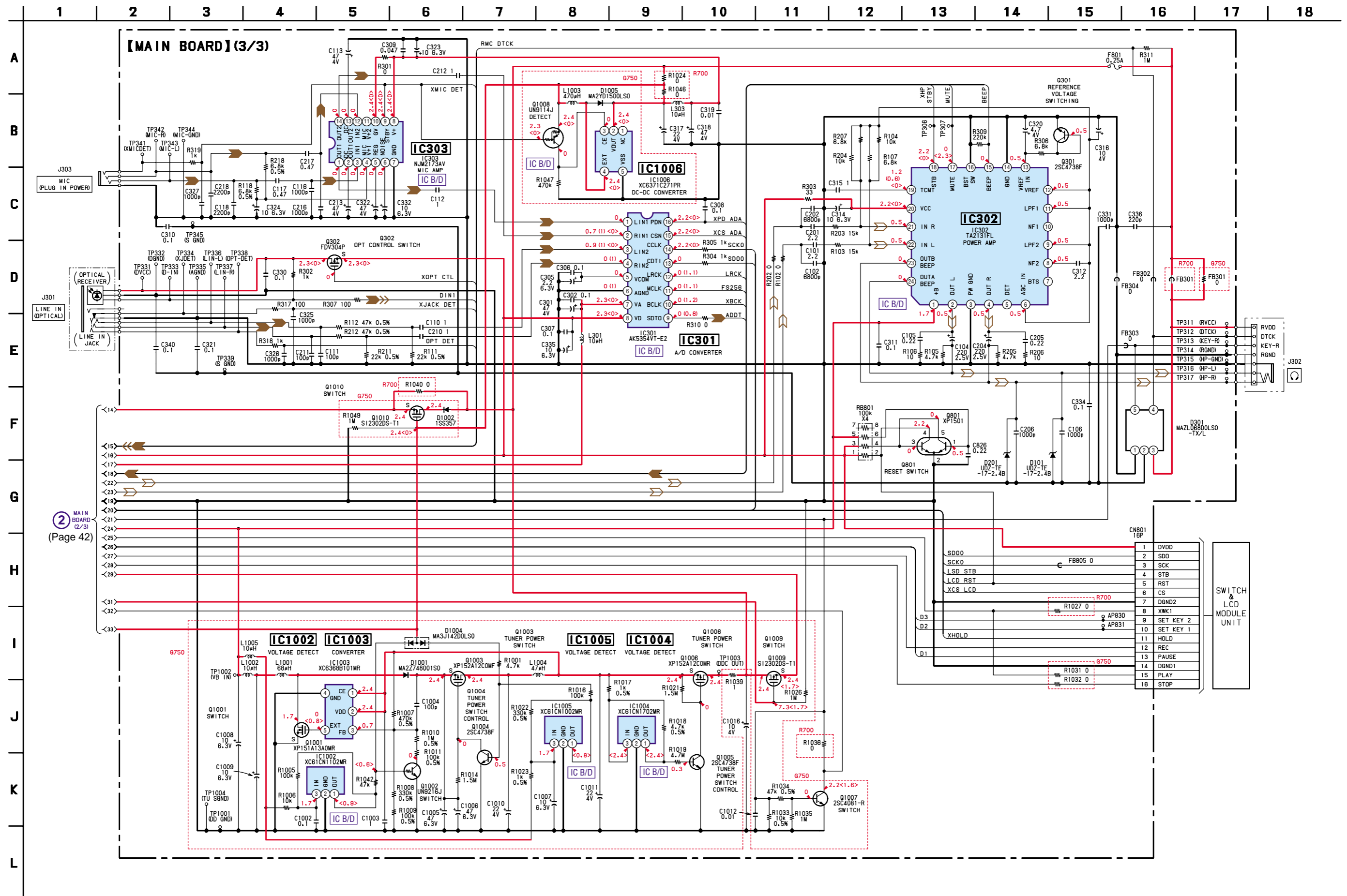


1 MAIN BOARD (1/3) (Page 41)

2 MAIN BOARD (2/3) (Page 43)

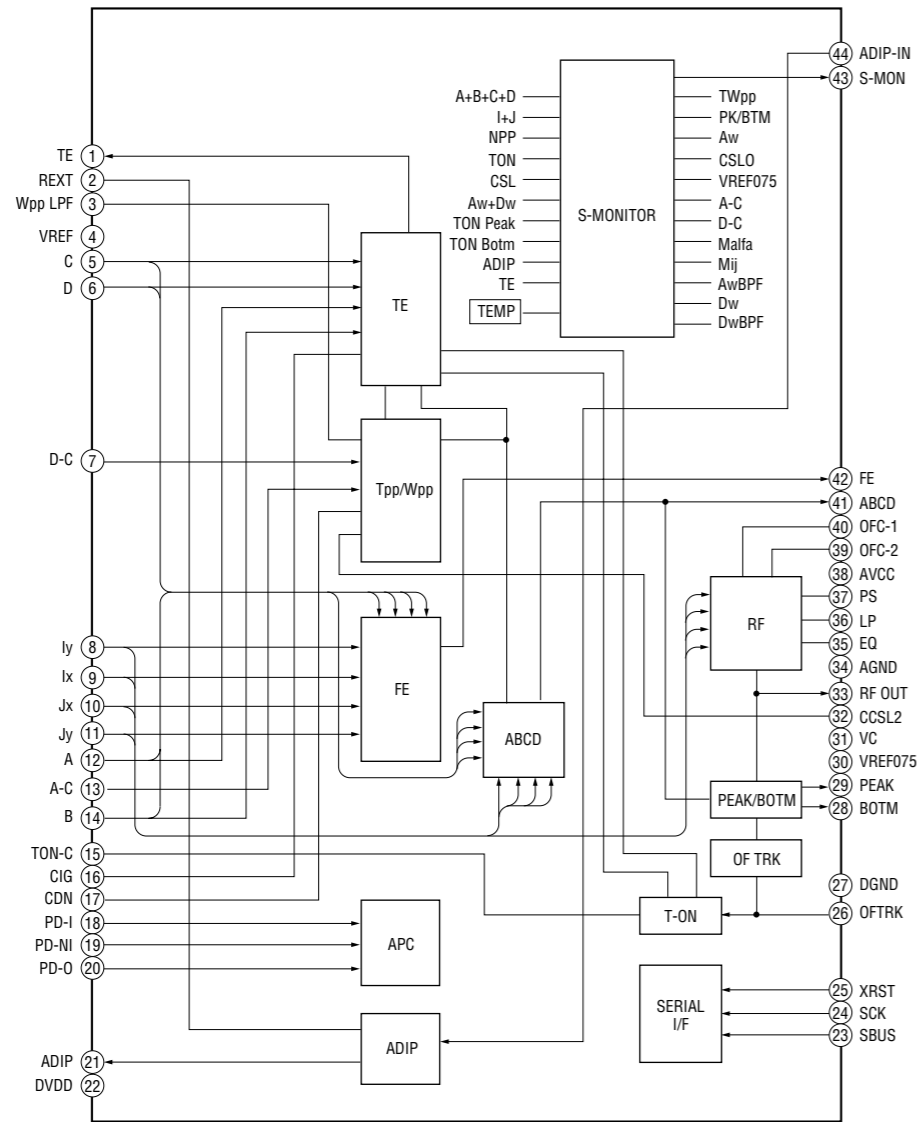
2 MAIN BOARD (2/3) (Page 43)

6-8. SCHEMATIC DIAGRAM — MAIN SECTION (3/3) — • Refer to page 44 for IC Block Diagrams.

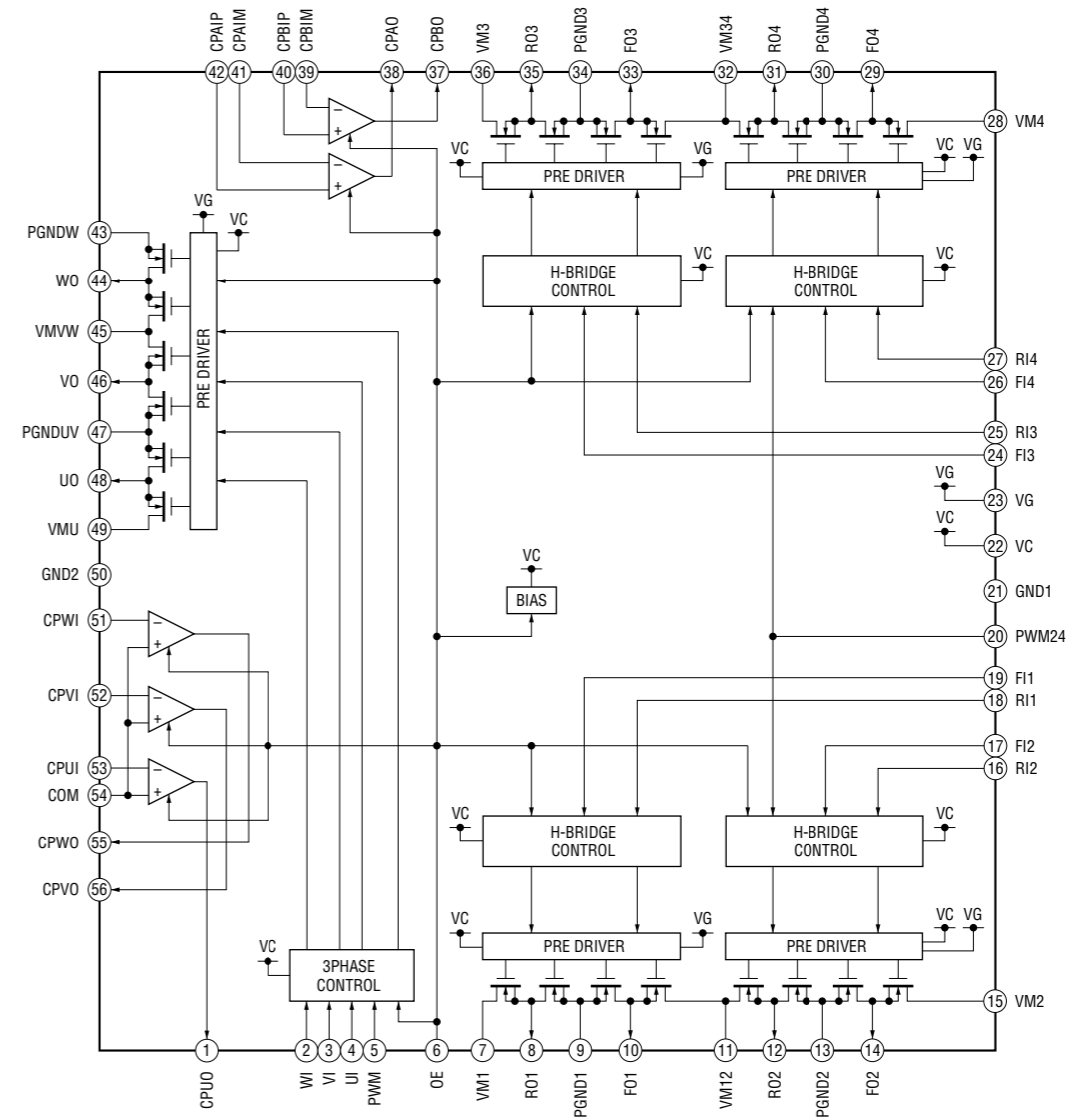


• IC BLOCK DIAGRAMS

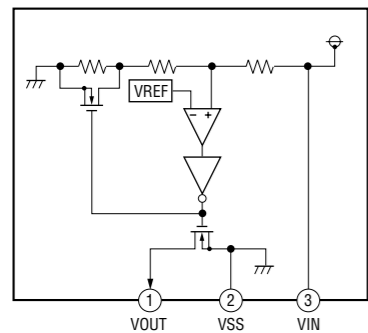
IC501 SN761057DBT



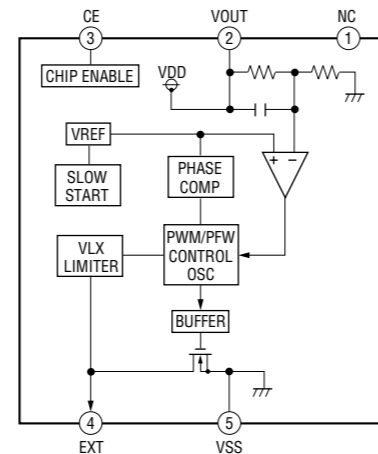
IC551 SC111257FCR2



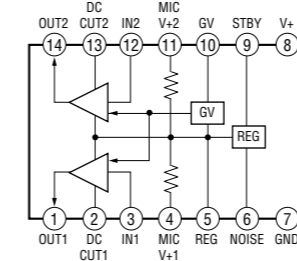
IC1002 XC61CN1102MR (MZ-G750)
 IC1004 XC61CN1702MR (MZ-G750)
 IC1005 XC61CN1002MR (MZ-G750)



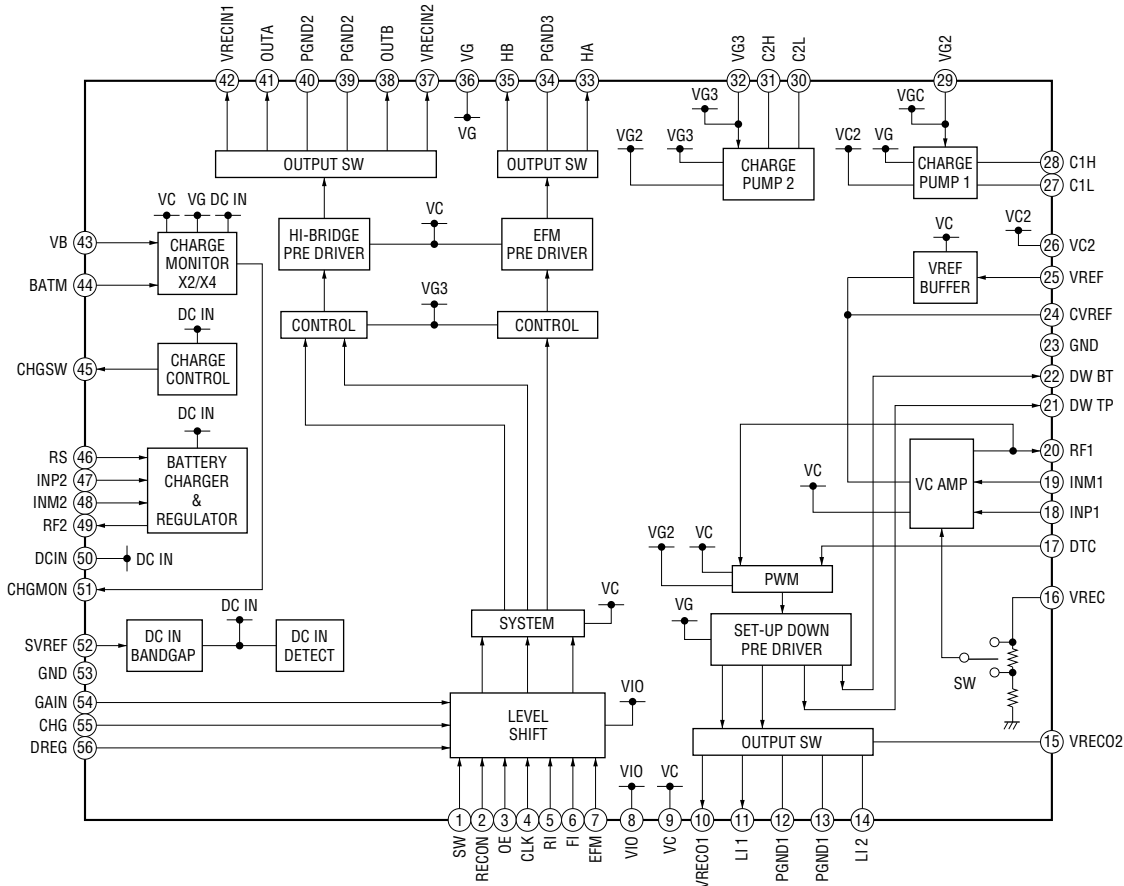
IC1006 XC6371C271PR (MZ-G750)



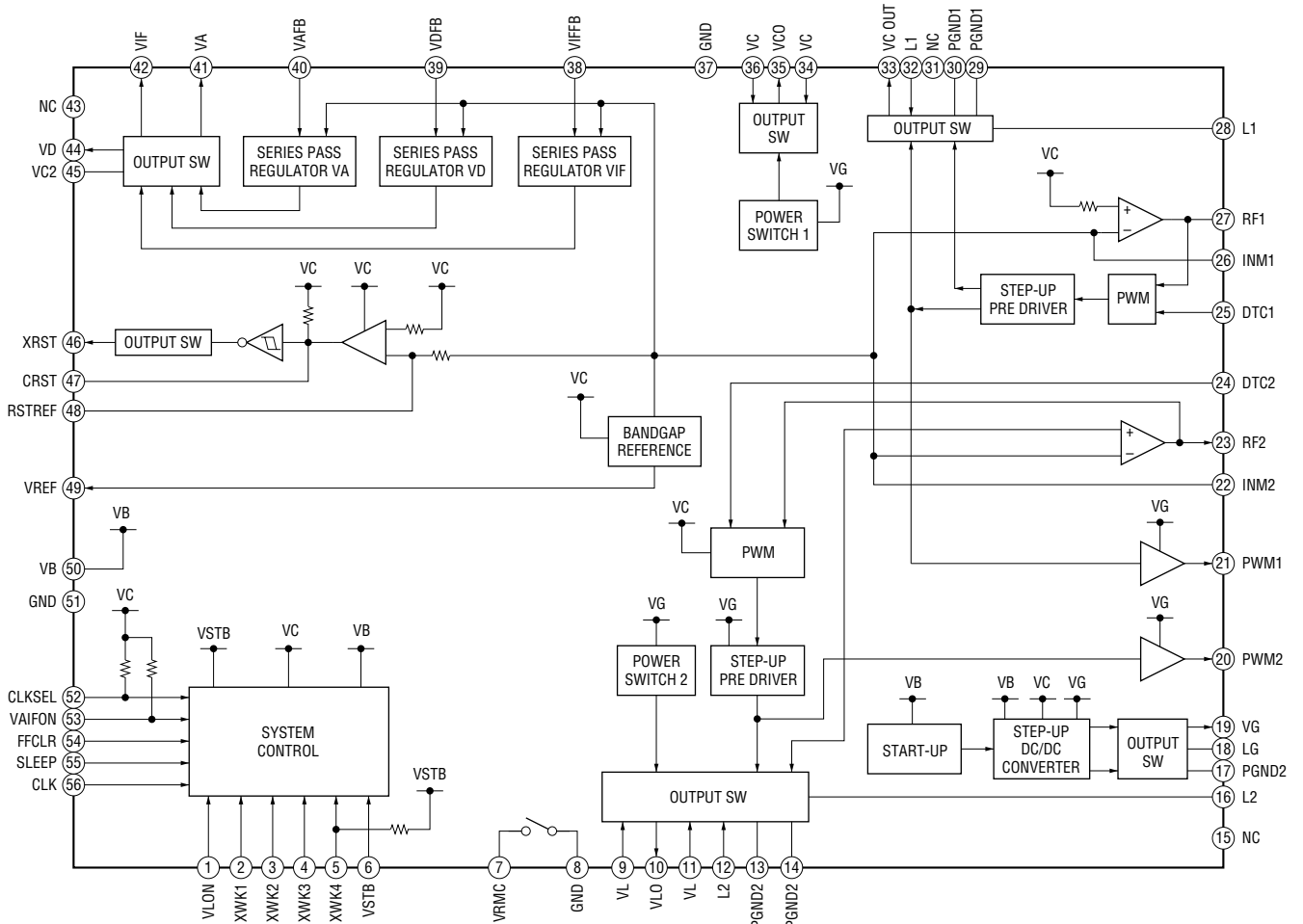
IC303 NJM2173AV



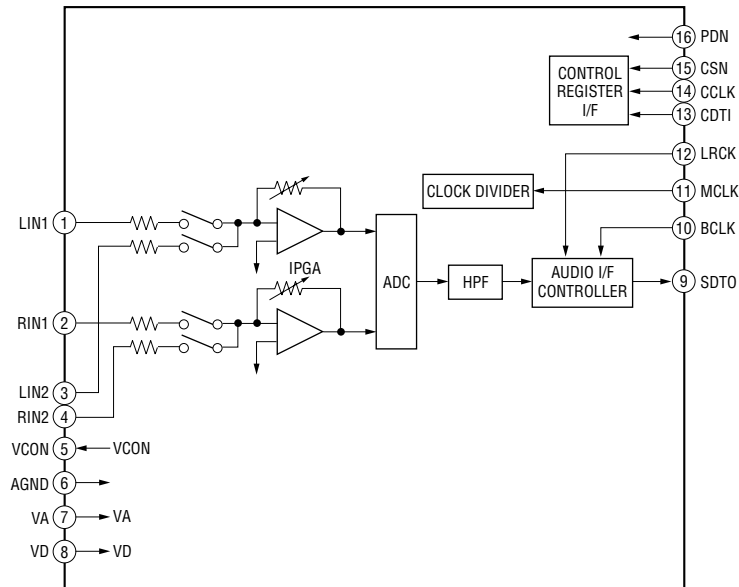
IC601 XPC18A22FCR2



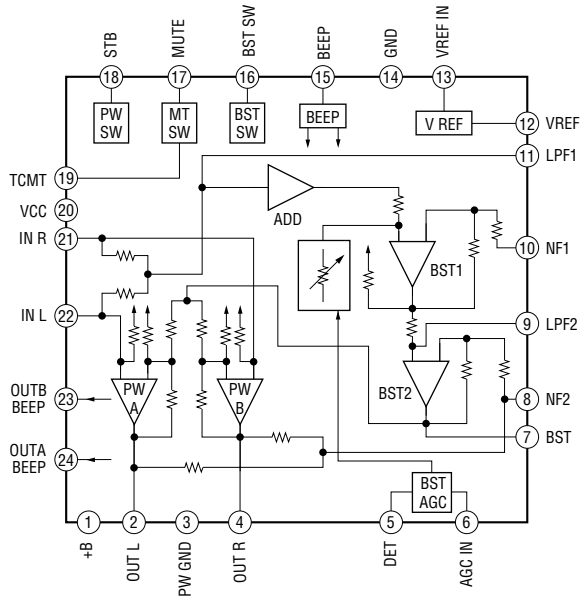
IC901 XPC18A32FCR2



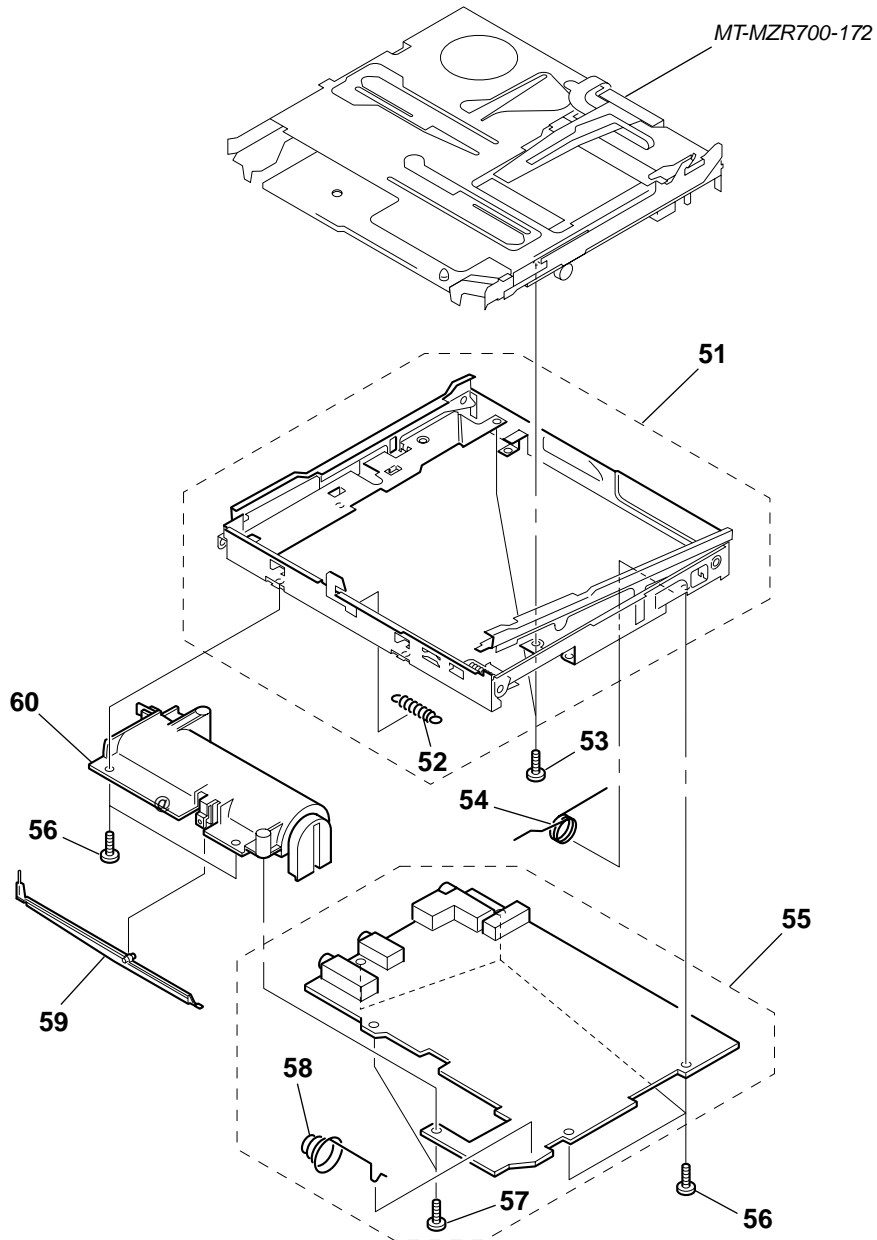
IC301 AK5354VT



IC302 TA2131FL

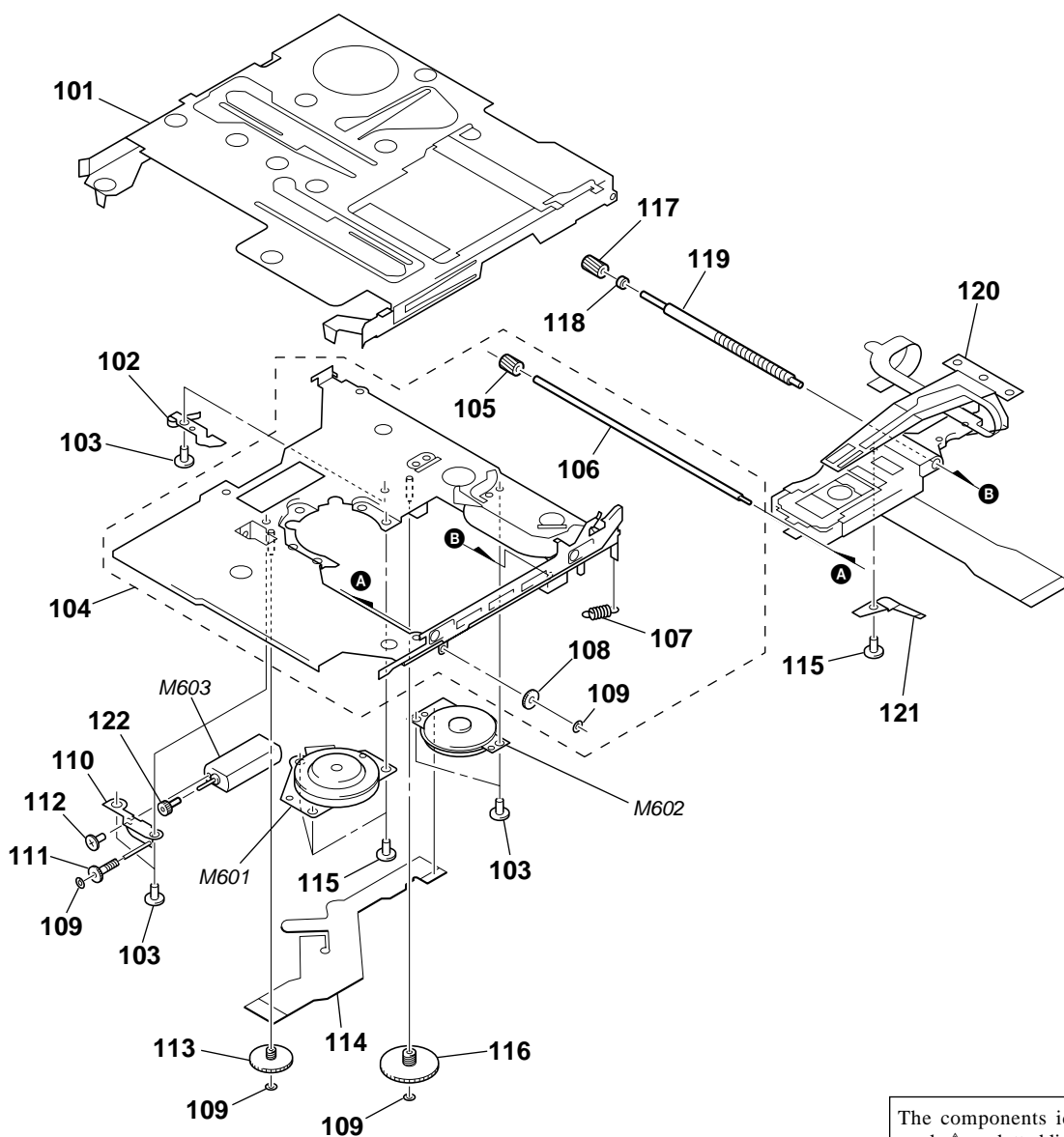


7-2. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	X-3379-555-1	CHASSIS ASSY, SET		56	3-335-797-01	SCREW (M1.4X2), TOOTHED LOCK	
52	3-222-779-01	SPRING (OPEN), TENSION		57	3-318-382-01	SCREW (1.7X3), TAPPING	
53	4-218-233-09	SCREW (1.4X1.6), MI		58	3-222-837-01	SPRING, BATTERY COIL	
54	3-222-780-01	SPRING, TORSION		59	3-222-838-01	ARM	
* 55	A-3323-650-A	MAIN BOARD, COMPLETEY (R700)		60	X-3379-899-1	CASE ASSY, BATTERY	
* 55	A-3323-652-A	MAIN BOARD, COMPLETEY (G750)					

7-3. MD MECHANISM DECK SECTION
(MT-MZR700-172)



The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	X-3379-515-1	HOLDER ASSY		114	1-679-372-11	MOTOR FLEXIBLE BOARD	
102	3-224-779-01	SPRING, THRUST DETENT		115	4-963-883-31	SCREW (M1.4), PRECISION PAN	
103	4-963-883-42	SCREW (M1.4), PRECISION PAN		116	4-222-216-01	GEAR (SA)	
104	X-3379-514-1	CHASSIS ASSY		117	4-222-208-01	GEAR (SB)	
105	4-222-218-01	GEAR (HD)		118	4-222-204-01	BEARING (N)	
106	4-222-223-01	SHAFT, SUB		119	4-222-203-01	SCREW, LEAD	
107	4-222-226-01	SPRING (EJECT), TENSION		\triangle 120	X-3379-508-1	SERVICE ASSY, OP (LCX-4R)	
108	4-222-222-01	GEAR (RACK)		121	3-049-336-01	SPRING (S), RACK	
109	3-338-645-31	WASHER (0.8-2.5)		122	3-222-544-01	GEAR (HA)	
110	X-3380-408-1	CHASSIS ASSY, GEAR		M601	8-835-706-01	MOTOR, DC SSM18A/C-NP (SPINDLE) (WITH TURNTABLE)	
111	3-222-545-01	GEAR (HB)		M602	1-763-399-11	MOTOR, DC (SLED) (WITH GEAR)	
112	4-224-885-01	SCREW (M1.2X1.5)		M603	1-763-400-21	MOTOR, DC (OVER WRITE HEAD UP/DOWN)	
113	4-222-215-01	GEAR (HC)					

**SECTION 8
ELECTRICAL PARTS LIST**

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable
- CAPACITORS
uF : μ F
- COILS
uH : μ H

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u : μ , for example:
uA.. : μ A.. uPA.. : μ PA..
uPB.. : μ PB.. uPC.. : μ PC.. uPD.. : μ PD..
- Abbreviation
CET : East European & CSI model
EE : East European model
FR : French model
HK : Hong Kong model
JE : Tourist model

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-3323-650-A	MAIN BOARD, COMPLETE (R700)		C317	1-104-847-11	TANTAL. CHIP 22uF 20%	4V
*	A-3323-652-A	MAIN BOARD, COMPLETE (G750)		C318	1-131-862-91	TANTAL. CHIP 47uF 20%	4V
		*****		C319	1-164-943-11	CERAMIC CHIP 0.01uF 10%	16V
	3-222-837-01	SPRING, BATTERY COIL		C320	1-135-151-21	TANTALUM CHIP 4.7uF 20%	4V
	3-318-382-01	SCREW (1.7X3), TAPPING		C321	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
		< CAPACITOR >		C322	1-131-862-91	TANTAL. CHIP 47uF 20%	4V
C101	1-125-889-11	CERAMIC CHIP 2.2uF 10%	10V	C323	1-135-259-11	TANTAL. CHIP 10uF 20%	6.3V
C102	1-164-942-11	CERAMIC CHIP 0.0068uF 10%	16V	C324	1-135-259-11	TANTAL. CHIP 10uF 20%	6.3V
C104	1-135-868-91	TANTAL. CHIP 220uF 20%	2.5V	C325	1-164-937-11	CERAMIC CHIP 0.001uF 10%	16V
C105	1-115-467-11	CERAMIC CHIP 0.22uF 10%	10V	C326	1-164-937-11	CERAMIC CHIP 0.001uF 10%	16V
C106	1-164-937-11	CERAMIC CHIP 0.001uF 10%	16V	C327	1-164-937-11	CERAMIC CHIP 0.001uF 10%	16V
C110	1-125-837-11	CERAMIC CHIP 1uF 10%	6.3V	C330	1-107-820-11	CERAMIC CHIP 0.1uF 16V	
C111	1-164-874-11	CERAMIC CHIP 100PF 5%	16V	C331	1-164-937-11	CERAMIC CHIP 0.001uF 10%	16V
C112	1-125-837-11	CERAMIC CHIP 1uF 10%	6.3V	C332	1-135-259-11	TANTAL. CHIP 10uF 20%	6.3V
C113	1-131-862-11	TANTAL. CHIP 47uF 20%	4V	C334	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C116	1-164-937-11	CERAMIC CHIP 0.001uF 10%	16V	C335	1-135-259-11	TANTAL. CHIP 10uF 20%	6.3V
C117	1-125-891-11	CERAMIC CHIP 0.47uF 10%	10V	C336	1-164-933-11	CERAMIC CHIP 220PF 10%	16V
C118	1-164-939-11	CERAMIC CHIP 0.0022uF 10%	16V	C340	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C201	1-125-889-11	CERAMIC CHIP 2.2uF 10%	10V	C501	1-164-874-11	CERAMIC CHIP 100PF 5%	16V
C202	1-164-942-11	CERAMIC CHIP 0.0068uF 10%	16V	C502	1-127-772-11	CERAMIC CHIP 0.033uF 10%	10V
C204	1-135-868-11	TANTAL. CHIP 220uF 20%	2.5V	C503	1-164-940-11	CERAMIC CHIP 0.0033uF 10%	16V
C205	1-115-467-11	CERAMIC CHIP 0.22uF 10%	10V	C504	1-164-940-11	CERAMIC CHIP 0.0033uF 10%	16V
C206	1-164-937-11	CERAMIC CHIP 0.001uF 10%	16V	C505	1-164-943-11	CERAMIC CHIP 0.01uF 10%	16V
C210	1-125-837-11	CERAMIC CHIP 1uF 10%	6.3V	C506	1-127-772-11	CERAMIC CHIP 0.033uF 10%	10V
C211	1-164-874-11	CERAMIC CHIP 100PF 5%	16V	C507	1-127-772-11	CERAMIC CHIP 0.033uF 10%	10V
C212	1-125-837-11	CERAMIC CHIP 1uF 10%	6.3V	C508	1-164-938-11	CERAMIC CHIP 0.0015uF 10%	16V
C213	1-131-862-91	TANTAL. CHIP 47uF 20%	4V	C509	1-164-940-11	CERAMIC CHIP 0.0033uF 10%	16V
C216	1-164-937-11	CERAMIC CHIP 0.001uF 10%	16V	C510	1-164-850-11	CERAMIC CHIP 10PF 0.5PF	16V
C217	1-125-891-11	CERAMIC CHIP 0.47uF 10%	10V	C511	1-164-850-11	CERAMIC CHIP 10PF 0.5PF	16V
C218	1-164-939-11	CERAMIC CHIP 0.0022uF 10%	16V	C512	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C301	1-131-862-91	TANTAL. CHIP 47uF 20%	4V	C513	1-164-850-11	CERAMIC CHIP 10PF 0.5PF	16V
C302	1-107-820-11	CERAMIC CHIP 0.1uF 16V		C514	1-107-819-11	CERAMIC CHIP 0.022uF 10%	16V
C305	1-135-149-21	TANTALUM CHIP 2.2uF 20%	10V	C515	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C306	1-107-820-11	CERAMIC CHIP 0.1uF 16V		C516	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C307	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	C518	1-127-760-11	CERAMIC CHIP 4.7uF 10%	6.3V
C308	1-107-820-11	CERAMIC CHIP 0.1uF 16V		C519	1-164-940-11	CERAMIC CHIP 0.0033uF 10%	16V
C309	1-119-923-11	CERAMIC CHIP 0.047uF 10%	10V	C521	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C310	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	C522	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C311	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	C523	1-125-837-11	CERAMIC CHIP 1uF 10%	6.3V
C312	1-125-889-11	CERAMIC CHIP 2.2uF 10%	10V	C524	1-135-259-11	TANTAL. CHIP 10uF 20%	6.3V
C314	1-135-259-11	TANTAL. CHIP 10uF 20%	6.3V	C527	1-119-923-11	CERAMIC CHIP 0.047uF 10%	10V
C315	1-125-837-11	CERAMIC CHIP 1uF 10%	6.3V	C529	1-115-169-11	TANTALUM 10uF 20%	6.3V
C316	1-135-201-11	TANTALUM CHIP 10uF 20%	4V	C530	1-164-939-11	CERAMIC CHIP 0.0022uF 10%	16V
				C551	1-125-837-11	CERAMIC CHIP 1uF 10%	6.3V
				C552	1-125-837-11	CERAMIC CHIP 1uF 10%	6.3V

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C553	1-104-912-11	TANTAL. CHIP	3.3uF	20%	6.3V	C817	1-125-889-11	CERAMIC CHIP	2.2uF	10%	10V
C554	1-104-912-11	TANTAL. CHIP	3.3uF	20%	6.3V	C818	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C555	1-135-211-11	TANTAL. CHIP	6.8uF	20%	6.3V	C819	1-127-772-11	CERAMIC CHIP	0.033uF	10%	10V
C556	1-135-211-11	TANTAL. CHIP	6.8uF	20%	6.3V	C820	1-127-772-11	CERAMIC CHIP	0.033uF	10%	10V
C557	1-127-772-11	CERAMIC CHIP	0.033uF	10%	10V	C821	1-131-862-91	TANTAL. CHIP	47uF	20%	4V
C558	1-127-772-11	CERAMIC CHIP	0.033uF	10%	10V	C822	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C559	1-127-772-11	CERAMIC CHIP	0.033uF	10%	10V	C823	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C561	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C825	1-164-874-11	CERAMIC CHIP	100PF	5%	16V
C601	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C826	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C602	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C827	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C603	1-128-964-11	TANTAL. CHIP	100uF	20%	6.3V	C828	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C604	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C830	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C605	1-164-937-11	CERAMIC CHIP	0.001uF	10%	16V	C901	1-115-169-11	TANTALUM	10uF	20%	6.3V
C606	1-164-874-11	CERAMIC CHIP	100PF	5%	16V	C902	1-115-169-11	TANTALUM	10uF	20%	6.3V
C607	1-164-874-11	CERAMIC CHIP	100PF	5%	16V	C903	1-128-964-11	TANTAL. CHIP	100uF	20%	6.3V
C608	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C904	1-119-749-11	TANTAL. CHIP	33uF	20%	4V
C609	1-131-862-11	TANTAL. CHIP	47uF	20%	4V	C905	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C610	1-104-851-11	TANTAL. CHIP	10uF	20%	10V	C906	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C611	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V	C907	1-125-889-11	CERAMIC CHIP	2.2uF	10%	10V
C612	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V	C908	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C613	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C909	1-164-937-11	CERAMIC CHIP	0.001uF	10%	16V
C614	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C910	1-164-937-11	CERAMIC CHIP	0.001uF	10%	16V
C615	1-137-760-11	CAP-CHIP	100PF	5%	100V	C911	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C616	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C912	1-164-937-11	CERAMIC CHIP	0.001uF	10%	16V
C618	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C913	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C619	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C914	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C621	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C915	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C622	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V	C917	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C623	1-131-862-11	TANTAL. CHIP	47uF	20%	4V	C918	1-125-889-11	CERAMIC CHIP	2.2uF	10%	10V
C624	1-115-169-11	TANTALUM	10uF	20%	6.3V	C919	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C627	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C920	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C628	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C921	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C629	1-164-874-11	CERAMIC CHIP	100PF	5%	16V	C922	1-164-937-11	CERAMIC CHIP	0.001uF	10%	16V
C630	1-113-690-11	ELECT CHIP	220uF	20%	4V	C924	1-164-937-11	CERAMIC CHIP	0.001uF	10%	16V
C631	1-126-246-11	ELECT CHIP	220uF	20%	4V	C926	1-115-169-11	TANTALUM	10uF	20%	6.3V
C632	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V	C1002	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C633	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V						(G750)
C801	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C1003	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C802	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V						(G750)
C803	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C1004	1-164-874-11	CERAMIC CHIP	100PF	5%	16V
C804	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V						(G750)
C805	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V	C1005	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C806	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V						(G750)
C807	1-164-850-11	CERAMIC CHIP	10PF	0.5PF	16V	C1006	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C808	1-164-850-11	CERAMIC CHIP	10PF	0.5PF	16V						(G750)
C809	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V	C1007	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C810	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V						(G750)
C811	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V	C1008	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C812	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V						(G750)
C813	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V	C1009	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C814	1-164-935-11	CERAMIC CHIP	470PF	10%	16V						(G750)
C815	1-131-862-91	TANTAL. CHIP	47uF	20%	4V	C1010	1-127-895-11	TANTAL. CHIP	22uF	20%	4V
C816	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V						(G750)
						C1011	1-127-895-11	TANTAL. CHIP	22uF	20%	4V
											(G750)

MZ-G750/R700

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C1012	1-164-943-11	CERAMIC CHIP	0.01uF 10% 16V (G750)	@ IC801	8-752-410-49	IC CXD2671-203GA	
C1016	1-137-762-11	TANTAL. CHIP	10uF 20% 4V	IC804	8-759-445-94	IC AK6480AM-E2	
		< CONNECTOR >		IC805	8-759-196-97	IC TC7SH32FU-TE85R	
CN501	1-573-360-21	CONNECTOR, FFC/FPC 20P		IC901	8-759-698-61	IC XPC18A32FCR2	
CN502	1-573-355-11	CONNECTOR, FFC/FPC 15P		IC1002	8-759-830-82	IC XC61CN1102MR (G750)	
CN801	1-573-356-21	CONNECTOR, FFC/FPC 16P		IC1003	8-759-657-26	IC XC6368B101MR (G750)	
		< DIODE >		IC1004	8-759-694-90	IC XC61CN1702MR (G750)	
D101	8-719-056-72	DIODE UDZ-TE-17-2.4B		IC1005	8-759-694-89	IC XC61CN1002MR (G750)	
D201	8-719-056-72	DIODE UDZ-TE-17-2.4B		IC1006	8-759-825-55	IC XC6371C271PR (G750)	
D301	8-719-068-83	DIODE MAZL068D0LS0-TX/L				< JACK >	
D601	8-719-081-33	DIODE MA2YD1500LS0		J301	1-793-619-21	JACK (LINE IN (OPTICAL))	
D602	8-719-081-33	DIODE MA2YD1500LS0		J302	1-793-288-42	JACK (⊘)	
D603	8-719-081-33	DIODE MA2YD1500LS0		J303	1-794-084-12	JACK (MIC (PLUG IN POWER))	
D605	8-719-081-33	DIODE MA2YD1500LS0		J601	1-785-383-11	JACK, DC (POLARITY UNIFIED TYPE)	(DC IN 3V)
D606	8-719-081-35	DIODE MA2YD1700LS0				< COIL >	
D607	8-719-081-33	DIODE MA2YD1500LS0		L301	1-414-398-11	INDUCTOR	10uH
D608	8-719-081-35	DIODE MA2YD1700LS0		L303	1-414-398-11	INDUCTOR	10uH
D803	8-719-017-58	DIODE MA8068		L501	1-414-398-11	INDUCTOR	10uH
D901	8-719-081-33	DIODE MA2YD1500LS0		L502	1-414-398-11	INDUCTOR	10uH
D902	8-719-081-33	DIODE MA2YD1500LS0		L551	1-410-389-31	INDUCTOR CHIP	47uH
D903	8-719-420-51	DIODE MA729		L552	1-410-389-31	INDUCTOR CHIP	47uH
D904	8-719-073-01	DIODE MA111-(K8).S0		L553	1-414-400-41	INDUCTOR	22uH
D1001	8-719-072-27	DIODE MA2Z748001S0 (G750)		L554	1-414-400-41	INDUCTOR	22uH
D1002	8-719-078-02	DIODE 1SS357(T3SONY1) (G750)		L601	1-419-959-21	INDUCTOR	6.8uH
D1003	8-719-081-33	DIODE MA2YD1500LS0		L602	1-414-398-11	INDUCTOR	10uH
D1004	8-719-059-50	DIODE MA3J142D0LS0 (G750)		L801	1-469-535-21	INDUCTOR	10uH
D1005	8-719-081-33	DIODE MA2YD1500LS0 (G750)		L802	1-469-535-21	INDUCTOR	10uH
		< FUSE >		L901	1-419-952-21	INDUCTOR	68uH
F801	1-576-439-21	FUSE (SMD) (0.25A)		L902	1-419-949-21	INDUCTOR	22uH
		< FERRITE BEAD >		L904	1-414-398-11	INDUCTOR	10uH
FB301	1-216-864-11	SHORT	0 (G750)	L905	1-469-426-21	INDUCTOR	100uH
FB301	1-500-329-11	INDUCTOR, FERRITE BEAD (R700)		L906	1-469-367-21	INDUCTOR	10uH
FB302	1-216-864-11	SHORT	0	L1001	1-419-258-21	INDUCTOR	68uH (G750)
FB303	1-216-864-11	SHORT	0	L1002	1-414-398-11	INDUCTOR	10uH (G750)
FB304	1-216-864-11	SHORT	0	L1003	1-414-852-41	INDUCTOR	470uH (G750)
FB801	1-414-226-11	INDUCTOR, FERRITE BEAD		L1004	1-410-389-31	INDUCTOR CHIP	47uH (G750)
FB802	1-216-864-11	SHORT	0	L1005	1-414-521-11	INDUCTOR	10uH (G750)
FB803	1-216-864-11	SHORT	0			< TRANSISTOR >	
FB804	1-216-864-11	SHORT	0	Q301	8-729-037-52	TRANSISTOR 2SD2216J-QR(TX).S0	
FB805	1-216-864-11	SHORT	0	Q302	8-729-046-49	FET FDV304P	
		< IC >		Q501	8-729-922-10	TRANSISTOR 2SA1577-QR	
IC301	8-759-694-88	IC AK5354VT-E2		Q601	8-729-046-45	FET SI2302DS-T1	
IC302	8-759-598-15	IC TA2131FL(EL)		Q602	8-729-046-44	TRANSISTOR ZDT6718TA	
IC303	8-759-825-56	IC NJM2173AV(TE2)		Q603	8-729-053-71	FET TS8K1TB	
IC501	8-759-689-67	IC SN761057DBT		Q604	8-729-046-43	FET HAT2051T-EL	
IC551	8-759-698-62	IC SC111257FCR2		Q605	8-729-046-42	FET HAT2050T-EL	
IC601	8-759-698-60	IC XPC18A22FCR2		Q801	8-729-429-44	TRANSISTOR XP1501	
				Q1001	8-729-052-37	FET XP151A13A0MR (G750)	

@ Replacement of CXD2671-203GA (IC801) used in this set requires a special tool. Therefore, it cannot be replaced.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q1002	8-729-013-60	TRANSISTOR RN1110-TE85L (G750)		R606	1-218-949-11	RES-CHIP 470	5% 1/16W
Q1003	8-729-051-50	FET XP152A12COMR (G750)		R607	1-218-945-11	RES-CHIP 220	5% 1/16W
Q1004	8-729-037-52	TRANSISTOR 2SD2216J-QR(TX).SO (G750)		R608	1-218-983-11	RES-CHIP 330K	5% 1/16W
Q1005	8-729-037-52	TRANSISTOR 2SD2216J-QR(TX).SO (G750)		R609	1-219-724-11	METAL CHIP 1	1% 1/4W
Q1006	8-729-051-50	FET XP152A12COMR (G750)		R610	1-218-990-11	SHORT 0	
Q1007	8-729-905-35	TRANSISTOR 2SC4081-R (G750)		R611	1-218-990-11	SHORT 0	
Q1008	8-729-037-62	TRANSISTOR UN9114J-(TX).SO (G750)		R613	1-218-957-11	RES-CHIP 2.2K	5% 1/16W
Q1009	8-729-046-45	FET SI2302DS-T1 (G750)		R619	1-218-990-11	SHORT 0	
Q1010	8-729-046-45	FET SI2302DS-T1 (G750)		R620	1-218-965-11	RES-CHIP 10K	5% 1/16W
		< RESISTOR >		R621	1-218-965-11	RES-CHIP 10K	5% 1/16W
R102	1-218-990-11	SHORT 0		R624	1-216-797-11	METAL CHIP 10	5% 1/16W
R103	1-218-967-11	RES-CHIP 15K	5% 1/16W	R801	1-218-981-11	RES-CHIP 220K	5% 1/16W
R104	1-218-965-11	RES-CHIP 10K	5% 1/16W	R802	1-208-927-11	METAL CHIP 47K	0.5% 1/16W
R105	1-218-961-11	RES-CHIP 4.7K	5% 1/16W	R803	1-208-927-11	METAL CHIP 47K	0.5% 1/16W
R106	1-218-929-11	RES-CHIP 10	5% 1/16W	R804	1-218-959-11	RES-CHIP 3.3K	5% 1/16W
R107	1-218-963-11	RES-CHIP 6.8K	5% 1/16W	R805	1-218-959-11	RES-CHIP 3.3K	5% 1/16W
R111	1-208-715-11	METAL CHIP 22K	0.5% 1/16W	R806	1-218-951-11	RES-CHIP 680	5% 1/16W
R112	1-208-927-11	METAL CHIP 47K	0.5% 1/16W	R807	1-218-929-11	RES-CHIP 10	5% 1/16W
R118	1-208-703-11	METAL CHIP 6.8K	0.5% 1/16W	R808	1-218-965-11	RES-CHIP 10K	5% 1/16W
R202	1-218-990-11	SHORT 0		R809	1-218-977-11	RES-CHIP 100K	5% 1/16W
R203	1-218-967-11	RES-CHIP 15K	5% 1/16W	R810	1-218-990-11	SHORT 0	
R204	1-218-965-11	RES-CHIP 10K	5% 1/16W	R812	1-218-990-11	SHORT 0	
R205	1-218-961-11	RES-CHIP 4.7K	5% 1/16W	R813	1-218-990-11	SHORT 0	(R700)
R206	1-218-929-11	RES-CHIP 10	5% 1/16W	R814	1-218-929-11	RES-CHIP 10	5% 1/16W
R207	1-218-963-11	RES-CHIP 6.8K	5% 1/16W	R815	1-218-990-11	SHORT 0	
R211	1-208-715-11	METAL CHIP 22K	0.5% 1/16W	R816	1-218-990-11	SHORT 0	
R212	1-208-927-11	METAL CHIP 47K	0.5% 1/16W	R817	1-218-977-11	RES-CHIP 100K	5% 1/16W
R218	1-208-703-11	METAL CHIP 6.8K	0.5% 1/16W	R821	1-218-981-11	RES-CHIP 220K	5% 1/16W
R301	1-218-990-11	SHORT 0		R822	1-218-953-11	RES-CHIP 1K	5% 1/16W
R302	1-218-953-11	RES-CHIP 1K	5% 1/16W	R823	1-218-945-11	RES-CHIP 220	5% 1/16W
R303	1-218-935-11	RES-CHIP 33	5% 1/16W	R824	1-218-959-11	RES-CHIP 3.3K	5% 1/16W
R304	1-218-953-11	RES-CHIP 1K	5% 1/16W	R825	1-202-974-11	RES-CHIP 3.3M	5% 1/16W
R305	1-218-953-11	RES-CHIP 1K	5% 1/16W	R828	1-208-691-11	METAL CHIP 2.2K	0.5% 1/16W
R306	1-218-963-11	RES-CHIP 6.8K	5% 1/16W	R829	1-208-691-11	METAL CHIP 2.2K	0.5% 1/16W
R307	1-218-941-11	RES-CHIP 100	5% 1/16W	R830	1-218-989-11	RES-CHIP 1M	5% 1/16W
R309	1-218-981-11	RES-CHIP 220K	5% 1/16W	R831	1-218-990-11	SHORT 0	
R310	1-218-990-11	SHORT 0		R834	1-208-715-11	METAL CHIP 22K	0.5% 1/16W
R311	1-218-989-11	RES-CHIP 1M	5% 1/16W	R835	1-218-983-11	RES-CHIP 330K	5% 1/16W
R317	1-218-941-11	RES-CHIP 100	5% 1/16W	R836	1-218-990-11	SHORT 0	
R318	1-218-953-11	RES-CHIP 1K	5% 1/16W	R837	1-218-990-11	SHORT 0	
R319	1-218-953-11	RES-CHIP 1K	5% 1/16W	R839	1-208-939-11	METAL CHIP 150K	0.5% 1/16W
R501	1-218-971-11	RES-CHIP 33K	5% 1/16W	R840	1-216-809-11	METAL CHIP 100	5% 1/16W
R505	1-208-703-11	METAL CHIP 6.8K	0.5% 1/16W	R841	1-218-990-11	SHORT 0	
R507	1-218-953-11	RES-CHIP 1K	5% 1/16W	R902	1-218-985-11	RES-CHIP 470K	5% 1/16W
R517	1-208-691-11	METAL CHIP 2.2K	0.5% 1/16W	R903	1-218-957-11	RES-CHIP 2.2K	5% 1/16W
R519	1-218-977-11	RES-CHIP 100K	5% 1/16W	R905	1-218-957-11	RES-CHIP 2.2K	5% 1/16W
R521	1-218-446-11	METAL CHIP 1	5% 1/16W	R906	1-218-990-11	SHORT 0	
R601	1-218-989-11	RES-CHIP 1M	5% 1/16W	R907	1-218-985-11	RES-CHIP 470K	5% 1/16W
R602	1-218-981-11	RES-CHIP 220K	5% 1/16W	R908	1-218-977-11	RES-CHIP 100K	5% 1/16W
R603	1-218-977-11	RES-CHIP 100K	5% 1/16W	R909	1-218-965-11	RES-CHIP 10K	5% 1/16W
R604	1-219-724-11	METAL CHIP 1	1% 1/4W	R910	1-218-965-11	RES-CHIP 10K	5% 1/16W
R605	1-242-996-91	METAL CHIP 0.68	1% 1/4W	R911	1-218-949-11	RES-CHIP 470	5% 1/16W
				R914	1-218-941-11	RES-CHIP 100	5% 1/16W

MZ-G750/R700

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R915	1-216-296-00	SHORT	0	R1033	1-208-707-11	METAL CHIP	10K 0.5% 1/16W (G750)
R917	1-208-699-11	METAL CHIP	4.7K 0.5% 1/16W	R1034	1-208-927-11	METAL CHIP	47K 0.5% 1/16W (G750)
R920	1-208-707-11	METAL CHIP	10K 0.5% 1/16W (R700)	R1035	1-218-989-11	RES-CHIP	1M 5% 1/16W (G750)
R921	1-218-979-11	RES-CHIP	150K 5% 1/16W (R700)	R1036	1-218-990-11	SHORT	0 (R700)
R921	1-218-989-11	RES-CHIP	1M 5% 1/16W (G750)	R1039	1-219-724-11	METAL CHIP	1 1% 1/4W
R936	1-208-715-11	METAL CHIP	22K 0.5% 1/16W	R1040	1-218-990-11	SHORT	0 (R700)
R941	1-218-969-11	RES-CHIP	22K 5% 1/16W	R1042	1-218-973-11	RES-CHIP	47K 5% 1/16W (G750)
R946	1-208-715-11	METAL CHIP	22K 0.5% 1/16W	R1046	1-218-990-11	SHORT	0 (R700)
R947	1-208-695-11	METAL CHIP	3.3K 0.5% 1/16W	R1047	1-218-985-11	RES-CHIP	470K 5% 1/16W (G750)
R948	1-208-939-11	METAL CHIP	150K 0.5% 1/16W	R1049	1-218-989-11	RES-CHIP	1M 5% 1/16W (G750)
R1001	1-218-961-11	RES-CHIP	4.7K 5% 1/16W (G750)	< NETWORK RESISTOR >			
R1005	1-218-977-11	RES-CHIP	100K 5% 1/16W (G750)	RB551	1-233-959-21	RES, NETWORK (CHIP TYPE)	470
R1006	1-218-965-11	RES-CHIP	10K 5% 1/16W (G750)	RB552	1-233-973-11	RES, NETWORK (CHIP TYPE)	100K
R1007	1-218-985-11	METAL CHIP	470K 0.5% 1/16W (G750)	RB553	1-233-967-11	RES, NETWORK (CHIP TYPE)	10K
R1008	1-208-947-11	METAL CHIP	330K 0.5% 1/16W (G750)	RB801	1-233-973-11	RES, NETWORK (CHIP TYPE)	100K
R1009	1-208-935-11	METAL CHIP	100K 0.5% 1/16W (G750)	< SWITCH >			
R1010	1-216-857-11	METAL CHIP	1M 5% 1/16W (G750)	S803	1-762-805-21	SWITCH, PUSH (1 KEY)	(PROTECT DETECT)
R1011	1-208-935-11	METAL CHIP	100K 0.5% 1/16W (G750)	S805	1-771-868-11	SWITCH, PUSH (1 KEY)	(HALF LOCK)
R1014	1-220-398-11	RES-CHIP	1.5M 5% 1/16W (G750)	S806	1-762-805-21	SWITCH, PUSH (1 KEY)	(OPEN/CLOSE DETECT)
R1016	1-218-977-11	RES-CHIP	100K 5% 1/16W (G750)	< FILTER >			
R1017	1-208-683-11	METAL CHIP	1K 0.5% 1/16W (G750)	T601	1-416-405-21	FILTER, CHIP EMI	(COMMON MODE)
R1018	1-208-699-11	METAL CHIP	4.7K 0.5% 1/16W (G750)	< THERMISTOR >			
R1019	1-243-975-11	RES, CHIP	4.7M 5% 1/16W (G750)	TH601	1-533-817-21	THERMISTOR	
R1021	1-220-398-11	RES-CHIP	1.5M 5% 1/16W (G750)	< VIBRATOR >			
R1022	1-208-947-11	METAL CHIP	330K 0.5% 1/16W (G750)	X801	1-795-023-21	VIBRATOR, CRYSTAL	(45.1584MHz)
R1023	1-208-683-11	METAL CHIP	1K 0.5% 1/16W (G750)	*****			
R1024	1-218-990-11	SHORT	0 (R700)	MISCELLANEOUS			
R1025	1-218-990-11	SHORT	0 (R700)	*****			
R1026	1-218-989-11	RES-CHIP	1M 5% 1/16W (G750)	5	1-476-305-11	LCD MODULE	(G750)
R1027	1-218-990-11	SHORT	0 (R700)	5	1-804-198-11	LCD MODULE	(R700)
R1028	1-218-990-11	SHORT	0 (R700)	114	1-679-372-11	MOTOR FLEXIBLE BOARD	
R1029	1-218-990-11	SHORT	0 (G750)	△ 120	X-3379-508-1	SERVICE ASSY, OP	(LCX-4R)
R1030	1-218-979-11	RES-CHIP	150K 5% 1/16W (G750)	M601	8-835-706-01	MOTOR, DC SSM18A/C-NP	(SPINDLE) (WITH TURNTABLE)
R1031	1-218-990-11	SHORT	0 (G750)	M602	1-763-399-11	MOTOR, DC (SLED)	(WITH GEAR)
R1032	1-218-990-11	SHORT	0 (G750)	M603	1-763-400-21	MOTOR, DC (OVER WRITE HEAD UP/DOWN)	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
	ACCESSORIES & PACKING MATERIALS		

△	1-418-028-12	ADAPTOR, AC (AC-MZR55) (R700:JE)	
△	1-476-275-11	ADAPTOR, AC (AC-MZR55) (G750:AEP,CET,FR/ R700:AEP,FR,EE)	
△	1-476-277-11	ADAPTOR, AC (AC-MZR55) (G750:UK,HK/ R700:UK,HK)	
	1-476-303-11	REMOTE CONTROL UNIT (RM-MZ47) (R700)	
	1-476-304-31	CONTROL UNIT, TUNER WITH REMOTE (RM-MZ1T) (G750:JE,HK)	
	1-476-304-41	CONTROL UNIT, TUNER WITH REMOTE (RM-MZ1T) (G750:AEP,UK,CET)	
	1-476-304-61	CONTROL UNIT, TUNER WITH REMOTE (RM-MZ1T) (G750:FR)	
△	1-569-007-11	ADAPTOR, CONVERSION 2P (G750:JE/R700:JE)	
	1-756-145-11	BATTERY, NICKEL CADMIUM (NC-WMAA) (G750:JE,HK/R700:JE,HK)	
	1-756-145-21	BATTERY, NICKEL CADMIUM (NC-WMAA) (G750:AEP,UK,CET,FR/R700:AEP,UK,FR,EE)	
	1-779-504-11	CONNECTOR, OPTICAL (G750:AEP,UK,CET,FR/ R700:AEP,UK,FR,EE)	
	1-779-504-51	CONNECTOR, OPTICAL (G750:JE,HK/ R700:JE,HK)	
	1-794-451-11	CONNECTOR, LIGHT (G750:AEP,UK,CET,FR/ R700:AEP,UK,FR,EE)	
	1-794-451-51	CONNECTOR, LIGHT (G750:JE,HK/R700:JE,HK)	
	3-222-163-01	POUCH, CARRYING (G750:JE,HK/R700:JE,HK)	
	3-223-571-01	CASE, BATTERY CARRYING	
	3-223-666-11	MANUAL, INSTRUCTION (ENGLISH) (R700:AEP,UK,EE)	
	3-223-666-21	MANUAL, INSTRUCTION (FRENCH) (R700:AEP,FR)	
	3-223-666-31	MANUAL, INSTRUCTION (GERMAN,DUTCH, ITALIAN) (R700:AEP)	
	3-223-666-41	MANUAL, INSTRUCTION (PORTUGUESE,SPANISH) (R700:AEP,JE)	
	3-223-666-51	MANUAL, INSTRUCTION (SWEDISH,FINNISH) (R700:AEP)	
	3-223-666-61	MANUAL, INSTRUCTION (RUSSIAN,HUNGARIAN, POLISH,CZECH,SLOVAKIAN) (R700:EE)	
	3-223-666-71	MANUAL, INSTRUCTION (ENGLISH, TRADITIONAL CHINESE,KOREAN) (R700:JE,HK)	
	3-223-667-11	MANUAL, INSTRUCTION (ENGLISH) (G750:AEP,UK,CET)	
	3-223-667-21	MANUAL, INSTRUCTION (FRENCH) (G750:AEP,FR)	
	3-223-667-31	MANUAL, INSTRUCTION (GERMAN,DUTCH, ITALIAN) (G750:AEP)	
	3-223-667-41	MANUAL, INSTRUCTION (PORTUGUESE,SPANISH) (G750:AEP,JE)	
	3-223-667-51	MANUAL, INSTRUCTION (SWEDISH,FINNISH) (G750:AEP)	
	3-223-667-61	MANUAL, INSTRUCTION (RUSSIAN,HUNGARIAN, POLISH,CZECH,SLOVAKIAN) (G750:CET)	
	3-223-667-71	MANUAL, INSTRUCTION (ENGLISH, TRADITIONAL CHINESE,KOREAN) (G750:JE,HK)	
	3-228-300-01	CASE, BELT CLIP CARRYING (G750:AEP,UK,CET,FRR700:AEP,UK,FR,EE)	
	8-953-304-90	RECEIVER MDR-E805SP SET	

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