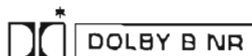


Service Manual

CD Stereo System

CD Stereo System

SA-CH55

*Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.



Color

(K) Black Type

Areas

Country Code	Area	Color
(E)	Continental Europe.	(K)
(EB)	Great Britain.	
(EG)	Germany and Italy.	
(GC)	Asia, Latin America, Middle Near East and Africa.	
(GN)	Oceania.	

■ SPECIFICATIONS (DIN 45 500)

AMPLIFIER SECTION

40 Hz–16 kHz continuous power output both channels driven	2 × 20 W (THD 1%, 6Ω)
1 kHz continuous power output both channels driven	2 × 30 W (THD 1%, 6Ω) (at 240 V)
MPO	2 × 120 W (THD 10%, 6Ω)
PMPO	240 W (THD 10%, 6Ω)
Total harmonic distortion half power at 1 kHz	0.07% (6Ω)
Frequency response PHONO	30 Hz–15 kHz RIAA standard curve ± 1 dB
Input sensitivity and impedance PHONO	3 mV/47 kΩ
Graphic equalizer	(63 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 12.5 kHz)

FM TUNER SECTION

Frequency range	87.50–108.00 MHz (0.05 MHz steps)
Sensitivity	14.7 dBf (1.5 μV, IHF58)
S/N 26 dB	1.3 μV (40 kHz mod., 75Ω)
Total harmonic distortion MONO	0.2%
STEREO	0.3%
S/N MONO	70 dB (75 dB, IHF)
Alternate channel selectivity ≥ 400 kHz	70 dB
Image rejection at 98 MHz	80 dB
Stereo separation 1 kHz	35 dB
Antenna terminal(s)	75Ω (unbalanced)

MW/LW TUNER SECTION

Frequency range MW	522–1611 kHz (9 kHz steps)
LW	530–1620 kHz (10 kHz steps)
	144–288 kHz (9 kHz steps)
Sensitivity (S/N 20 dB) MW (at 999 kHz, 1000 kHz)	500 μV/m
LW (at 254 kHz)	50 μV

CASSETTE DECK SECTION

Track system	4 track, 2 channel
Heads	
Playback	Permalloy head
Record/playback	Permalloy head
Erasure	Double gap ferrite head

System: SC-CH55

Motor	DC servo motor
Recording system	AC bias, 100 kHz
Tape speed	4.8 cm/sec
Frequency response	
NORMAL	40 Hz–14 kHz (+3, -6 dB)
CrO ₂	40 Hz–14 kHz (+3, -6 dB)
METAL	40 Hz–15 kHz (+3, -6 dB)
S/N (CrO ₂ type tape)	
Dolby NR off	52 dB (A-WTD)
Dolby NR on	61 dB (CCIR)
Wow and flutter	0.1% (WRMS)
Fast forward and rewind time	Approx. 110 seconds with C-60 cassette tape

CD SECTION

Number of channels	Stereo
Sampling frequency	44.1 kHz
Decoding	16-bit linear
Beam Source/wave length	Semiconductor laser/780 nm
Frequency response	20 Hz–20 kHz (+1, -2 dB)
S/N	95 dB Filter (JIS A)
Wow & Flutter	Below measurable limit
Digital filter	4 fs
GENERAL	
Power consumption	180 W
Power supply	
For Great Britain and Oceania	AC 50/60 Hz, 230–240 V
For Germany, Italy and Continental Europe	AC 50/60 Hz, 230 V
For others	AC 50/60 Hz, 110 V–127 V/220 V–240 V
Dimensions (W×H×D)	215×329×338 mm
Weight	7.7 kg

Notes:

- Specifications are subject to change without notice.
- Weight and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyzer.

System	Unit	
	Center	Speakers
SC-CH55	SA-CH55	SB-CH55 E, EB, EO: Service Manual Supplied from PAES

Panasonic

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■ PRECAUTION OF LASER DIODE

CAUTION: This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pick up lens.
Wave length: 780 nm
Maximum output radiation power from pick up: 100 μ W/VDE

Laser radiation from the pick up lens is safety level, but be sure the followings:

1. Do not disassemble the optical pick up unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pick up lens for a long time.

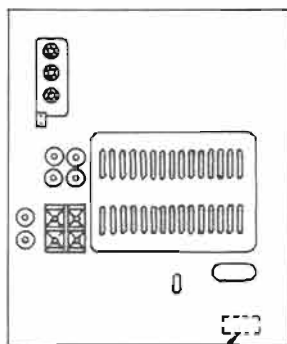
ACHTUNG: Dieses produkt enthält eine laserdioden. Im eingeschalteten zustand wird unsichtbare laserstrahlung von der lasereinheit abgestrahlt.

Wellenlänge: 780 nm
Maximale strahlungsleistung der lasereinheit: 100 μ W/VDE

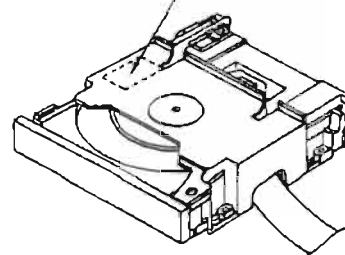
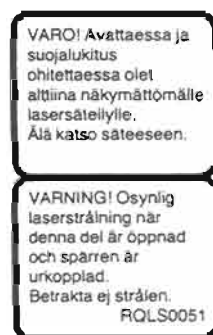
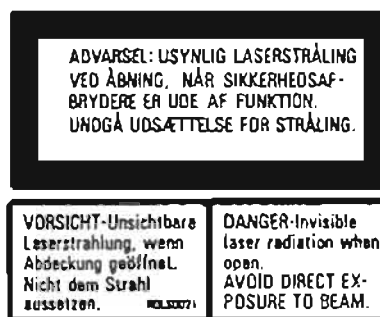
Die strahlung an der lasereinheit ist ungefährlich, wenn folgende punkte beachtet werden:

1. Die lasereinheit nicht zerlegen, da die strahlung an der freigelegten laserdioden gefährlich ist.
2. Den werksseitig justierten einstellregler der lasereinheit nicht verstellen.
3. Nicht mit optischen instrumenten in die fokussierlinse blicken.
4. Nicht über längere zeit in die fokussierlinse blicken.

ADVARSEL: I dette a apparat anvendes laser.



LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT



HANDLING PRECAUTIONS FOR TRAVERSE DECK

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.

So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

Handling of traverse deck (optical pickup)

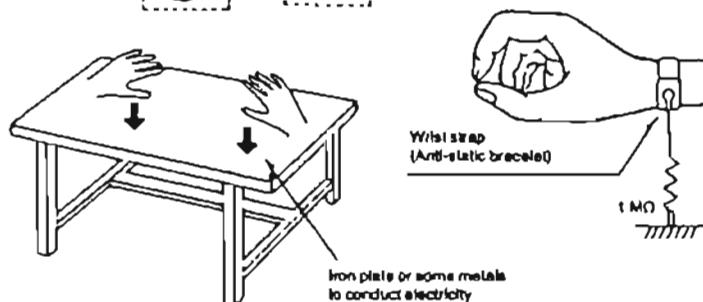
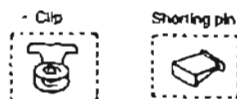
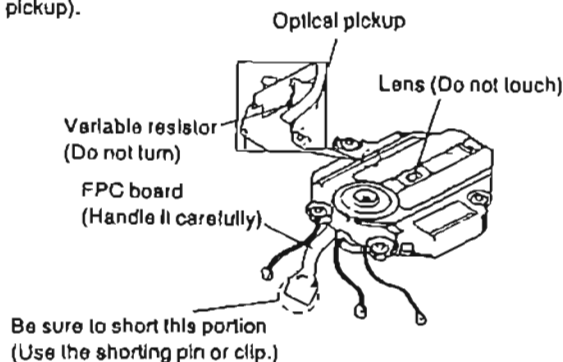
1. Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.
2. To prevent the breakdown of the laser diode, an anti-static shorting pin is inserted into the flexible board (FPC board). When removing or connecting the short pin, finish the job in as short time as possible.
3. Take care not to apply excessive stress to the flexible board (FPC board).
4. Do not turn the variable resistor (laser power adjustment). It has already been adjusted.

Grounding for electrostatic breakdown prevention

1. Human body grounding
Use the anti-static wrist strap to discharge the static electricity from your body.
2. Work table grounding
Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is placed, and ground the sheet.

Caution:

The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).



ACCESSORIES

AC power supply cord
 <RJA0019-K> (E/EG) ... 1 pc.
 <SJA193> (EB) 1 pc.
 <RJA0004> (GC) 1 pc.
 <SJA173> (GN) 1 pc.



FM indoor antenna
 <SSA270M> (E/EB/EG) . 1 pc.
 <SSA272M> (GC/GN) ...1 pc.



Remote control transmitter
 <RAK-SC306W> 1 pc.



LW/MW loop antenna
 <SPB1163-1M> 1 pc.



Antenna holder
 <SMA223-1M> 1 pc.



Mounting screws
 <XTN3+10AFZ> 2 pcs.



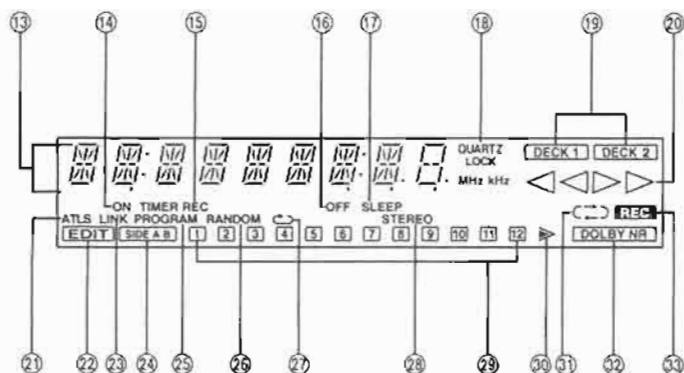
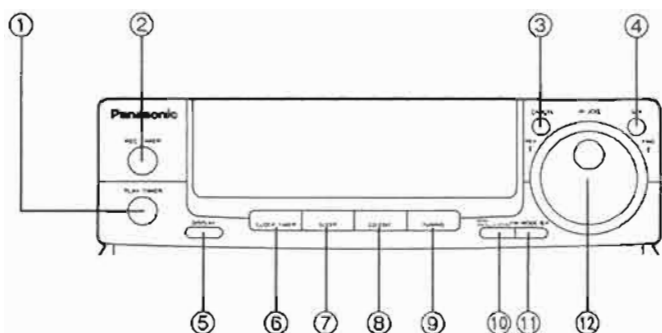
Remote control batteries
 <UM-4, "AAA", R03> 2 pcs



Attachment plug
 (For United Kingdom only)
 <SJP9009> (EB) 1 pc.



LOCATION OF CONTROLS



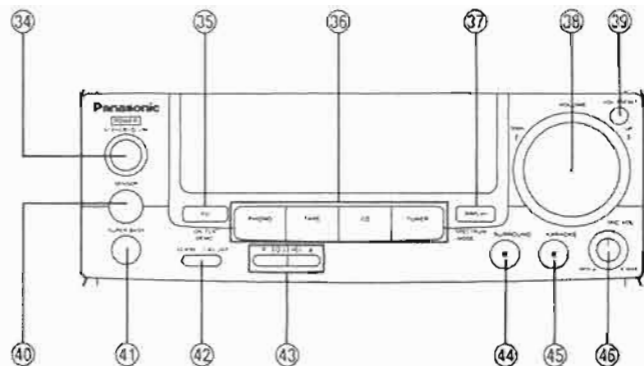
Tuner section

- ① **Timer play button (PLAY TIMER)**
This button is used for timer play.
- ② **Timer recording button (REC TIMER)**
This button is used for timer recording.
- ③ **Cancel button (CANCEL)**
This button is used to cancel the selected contents by using the jog dial.
- ④ **Setting button (SET)**
- ⑤ **Display select button (DISPLAY)**
This button is used to select the display (mode display, clock or tape counter, etc.).
- ⑥ **Clock/timer button (CLOCK/TIMER)**
This button is used to select the desired timer mode or to adjust the clock.
- ⑦ **Sleep timer button (SLEEP)**
This button is used when you wish to fall asleep while listening to the music.
- ⑧ **Compact disc edit-recording mode select button (CD EDIT)**
This button is used to select the desired edit-recording mode.
- ⑨ **Tuning mode select button (TUNING)**
This button is used to select the desired tuning mode (preset or manual).
- ⑩ **Band select button (-BAND, -MW ALLOCATION)**
This button is used to listen to the radio and select the desired radio band.
- ⑪ **FM mode/beat proof button (FM MODE/B.P.)**
This button is used to select the FM listening mode (stereo or monaural) during the FM broadcast station is received or to reduce the unwanted beat noise during MW/LW broadcast is recorded.
- ⑫ **Jog dial (AI JOG)**
This dial is used to select the contents of the mode, etc.

Display section

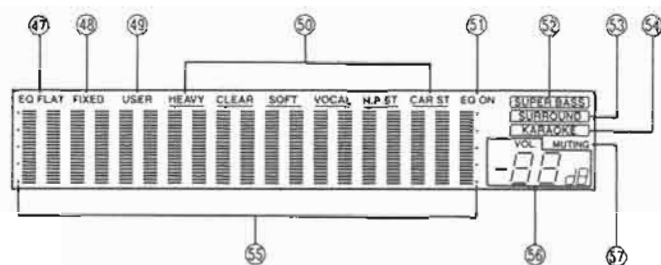
- ⑬ **Multi-display**
This display shows the selected source, present time, tape counter and the contents of the timer setting, received frequencies, compact disc edit-recording mode, etc.
- ⑭ **Timer on time indicator (ON)**
This indicator illuminates to show the timer on time.
- ⑮ **Timer recording indicator (TIMER REC)**
This indicator illuminates when the timer recording button is pressed.

- ⑯ **Timer off time indicator (OFF)**
This indicator illuminates to show the timer off time.
- ⑰ **Sleep timer indicator (SLEEP)**
This indicator illuminates when the sleep timer button is pressed.
- ⑱ **Quartz lock indicator (QUARTZ LOCK)**
This indicator illuminates when the unit is precisely tuned to a broadcast station.
- ⑲ **Deck 1/2 Indicator (DECK 1, DECK 2)**
This indicator illuminates to show the operational deck (deck 1 or deck 2.)
- ⑳ **Tape direction indicators (◀◀, ▶▶)**
These indicators illuminate to show the direction of tape travel.
- ㉑ **Automatic tape level setting indicator (ATLS)**
This indicator illuminates when the ATLS recording is performed.
- ㉒ **Compact disc edit-recording indicator (EDIT)**
This indicator illuminates when edit-recording from a compact disc is performed.
- ㉓ **Link Indicator (LINK)**
This indicator illuminates when the unit is in a condition the disc link is possible.
- ㉔ **Tape side indicator (SIDE A, B)**
This indicator shows the tape side (A or B) to be recorded on when the edit-recording of compact disc is performed.
- ㉕ **Program indicator (PROGRAM)**
This indicator illuminates during program play.
- ㉖ **Random play indicator (RANDOM)**
This indicator illuminates during random play.
- ㉗ **Repeat play indicator (↺)**
This indicator illuminates during repeat play.
- ㉘ **FM stereo indicator (STEREO)**
This indicator automatically illuminates when an FM stereo broadcast is being received. It will not illuminate if the FM mode/beat proof button is used to select monaural mode.
- ㉙ **Track number indicators (1-12)**
These indicators show the number of tracks. The number indicate on which side of the tape a given track will be recorded.
- ㉚ **Over indicator (▶)**
This indicator illuminates if the total number of tracks on the disc is 13 or more.
- ㉛ **Reverse mode indicators (↔)**
Each indicator illuminates to show which of the reverse modes was selected by the reverse mode button.
- ㉜ **Dolby noise reduction indicator (DOLBY NR)**
This indicator illuminates when the Dolby noise reduction system is activated.
- ㉝ **Recording indicator (REC)**
This indicator illuminates when the recording (recording standby) mode.



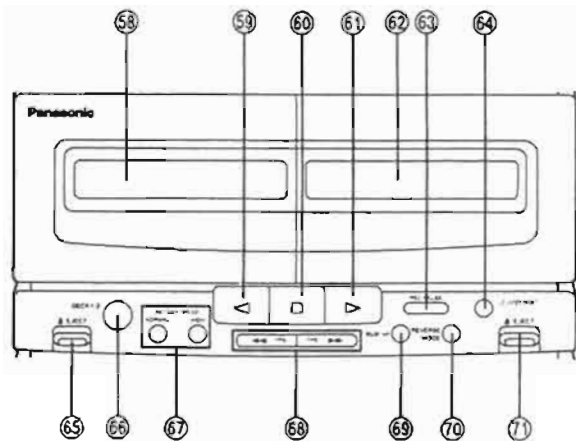
Amplifier section

- 34 Power "STANDBY (ON)" switch (POWER STANDBY (ON))**
This switch switches ON and OFF the secondary circuit power only. The unit is in the "standby" condition when this switch is set to the STANDBY (ON) position. Regardless of the switch setting, the primary circuit is always "live" as long as the power cord is connected to an electrical outlet.
- 35 Equalizer ON/FLAT button (EQ, -ON/FLAT, -DEMO)**
This button is used to switch the equalizer on or flat. If you press and hold this button, sound effects will be sequentially changed (Demonstration function).
- 36 Input select buttons (PHONO, TAPE, CD, TUNER)**
These buttons are used to select the sound source to be heard.
- 37 Display mode select button (DISPLAY, -SPECTRUM, -MODE)**
This button is used to select one of five spectrum curves. If you press and hold this button, the display mode will change.
- 38 Volume level control (VOLUME)**
This control is used to adjust the volume level. Note that -- dB is the lowest volume setting and 0 dB is the highest level setting.
- 39 Volume preset button (VOL. PRESET)**
This button is used when making a volume presetting for timer play.
- 40 Remote control signal sensor (SENSOR)**
- 41 Super bass button (SUPER BASS)**
When this button is pressed, the dynamic low frequency ranges are boosted.
- 42 Equalizer mode select button (-EQ MODE, -FIXED/USER)**
This is used to select the equalizer mode. If you press and hold this button, the equalizer mode (FIXED or USER) will be switched.
- 43 Equalizer level-control buttons (EQ LEVEL)**
These buttons are used to adjust of the equalization level.
- 44 Surround button (SURROUND)**
This button is used to activate the surround sound effect.
- 45 Karaoke button (KARAOKE)**
This button is used to perform "karaoke" (making microphone mixing with an accompaniment).
- 46 Microphone volume control (MIC VOL.)**
This control is used to adjust the microphone volume level.



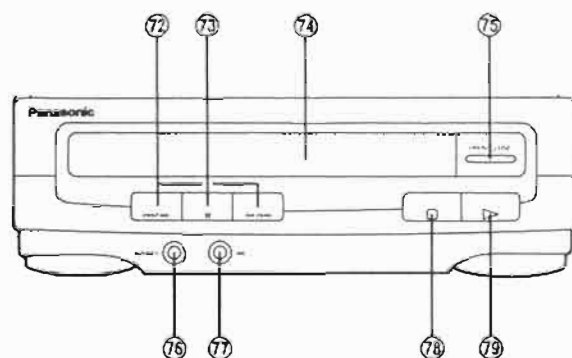
Display section

- 47 Equalizer flat indicator (EQ FLAT)**
This indicator illuminates when the equalizer function is turned off.
- 48 Fixed indicator (FIXED)**
This indicator illuminates when the pre-programmed equalization curve is selected.
- 49 User Indicator (USER)**
This indicator illuminates when the "USER" mode equalization curve is selected.
- 50 Equalization mode Indicators (HEAVY~CAR ST)**
These indicators show which of the six equalization curves is currently used.
- 51 Equalizer on indicator (EQ ON)**
This indicator illuminates when the equalizer function is turned on.
- 52 Super bass Indicator (SUPER BASS)**
This indicator illuminates when the super bass mode is activated.
- 53 Surround Indicator (SURROUND)**
This indicator illuminates when the surround effect is activated.
- 54 KARAOKE Indicator (KARAOKE)**
This indicator illuminates when KARAOKE mode is activated.
- 55 Equalization/spectrum analysis level display**
This display shows the equalization/spectrum analysis level.
- 56 Volume level display**
This display shows the volume level.
- 57 Muting Indicator (MUTING)**
This indicator illuminates when the muting mode is activated.



Cassette deck section

- 58 Deck 1 cassette holder
- 59 Reverse-side playback button (◀)
This button is used to start the playback or recording (deck 2) to the reverse direction.
- 60 Stop button (□)
This button is used to stop the tape.
- 61 Forward-side playback button (▶)
This button is used to start the playback or recording (deck 2) to the forward direction.
- 62 Deck 2 cassette holder
- 63 Record/record standby button (REC PAUSE)
This button is used to put deck 2 into the record standby mode.
- 64 Tape counter reset button (COUNTER RESET)
This button is used to reset the tape counter indicator to "000".
- 65 Deck 1 cassette eject button (▲ EJECT)
This button is used to open the cassette holder.
- 66 Deck 1/2 select button (DECK 1/2)
This button is used to select the deck to be operated.
- 67 One touch tape edit buttons (ONE TOUCH TAPE EDIT)
These buttons are used to start the tape-to-tape recording.
- 68 Fast-forward/rewind/tape program sensor buttons [◀◀ (TPS), (TPS) ▶▶]
These buttons are used to advance or rewind the tape, or to quickly search for the beginning of a tune while the tape is being played.
- 69 Dolby noise reduction button (DOLBY NR)
This button is used to reduce the hissing noise heard from the tape. This unit is provided with Dolby B-type noise reduction system.
- 70 Reverse mode select button (REVERSE MODE)
This button is used to select the reverse mode (for playback and recording).
- 71 Deck 2 cassette eject button (▲ EJECT)



Compact disc player section

- 72 Skip/search buttons (◀◀, ▶▶)
- 73 Pause button (||)
This button is used to stop the disc play temporarily.
- 74 Disc cover
- 75 Disc tray open/close button (OPEN/CLOSE)
- 76 Headphones jack (PHONES)
- 77 Microphone Jack (MIC)
- 78 Stop button (□)
This button is used to stop the disc play.
- 79 Play button (▶)
This button is used to start playing the disc.

DISASSEMBLY INSTRUCTIONS

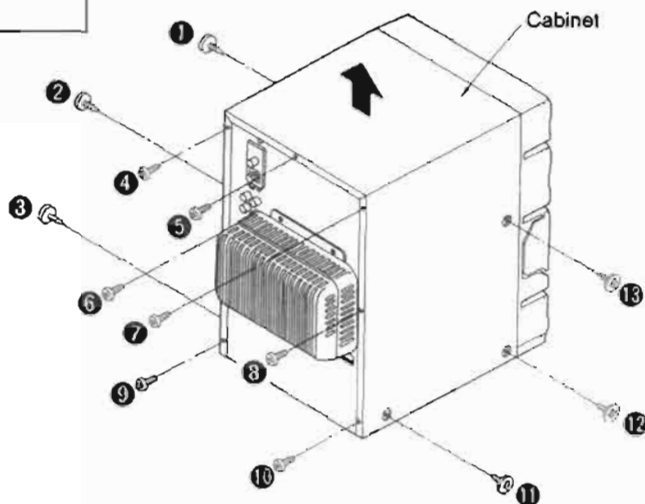
"ATTENTION SERVICER"

Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No.
1

Removal of the Cabinet

Procedure
1

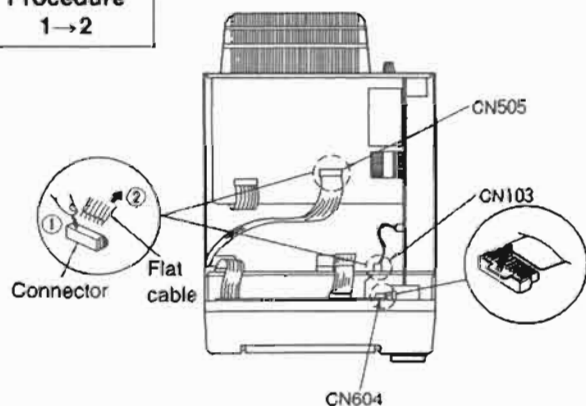


• Remove the 13 screws (①~⑬).

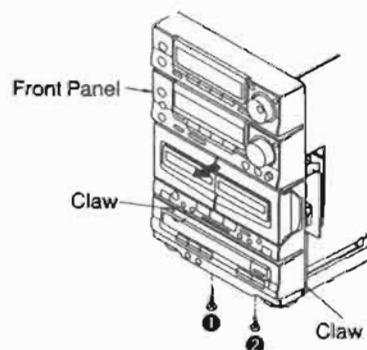
Ref. No.
2

Removal of the Front Panel

Procedure
1→2



1. Remove the 2 flat cables (CN103, CN505).
2. Remove the connector (CN604).

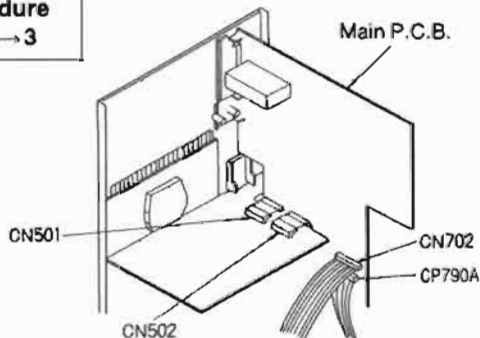


3. Remove the 2 screws (①, ②).
4. Remove the 2 claws and then remove the Front Panel in the direction of arrow.

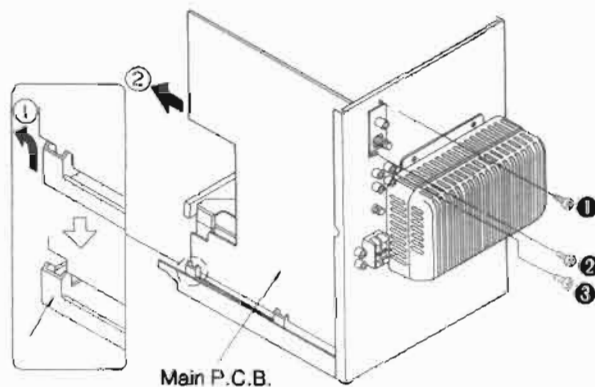
Ref. No.
3

Removal of the Main P.C.B.

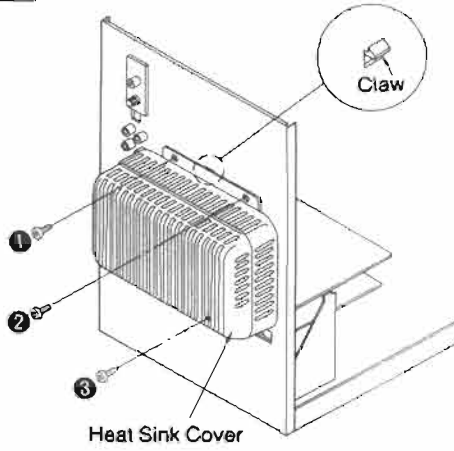
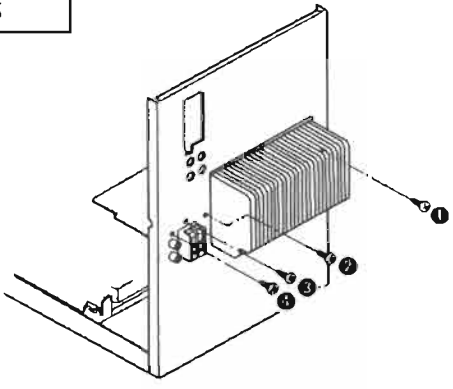
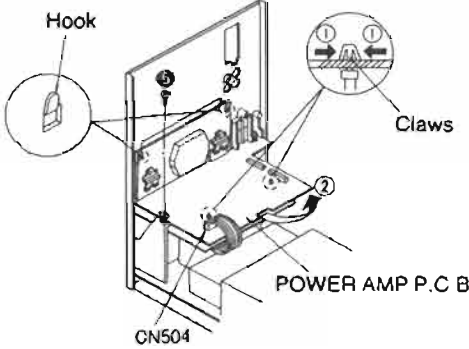
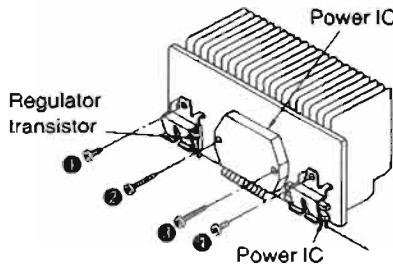
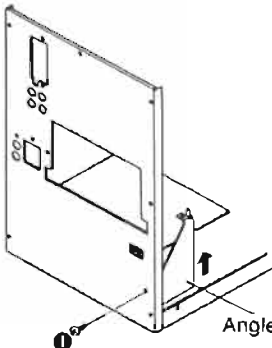
Procedure
1→2→3

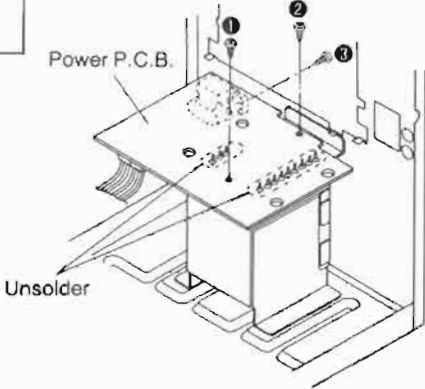
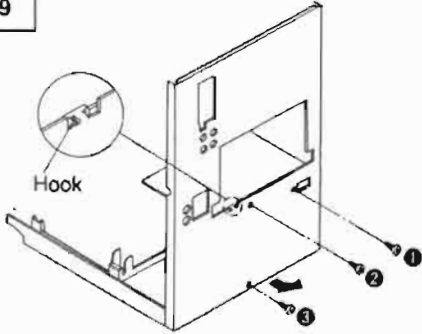
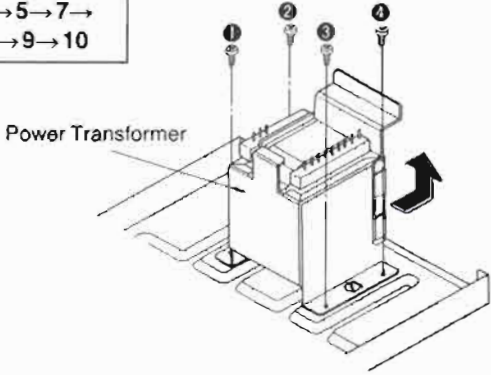
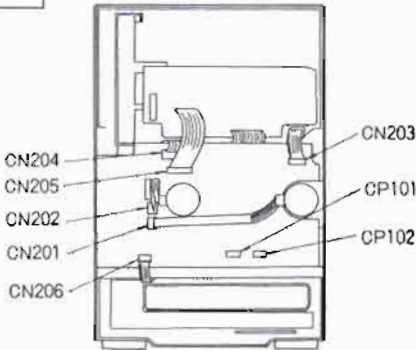
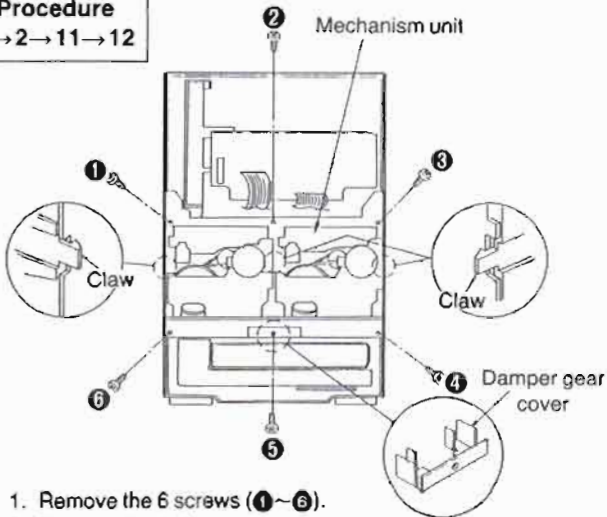


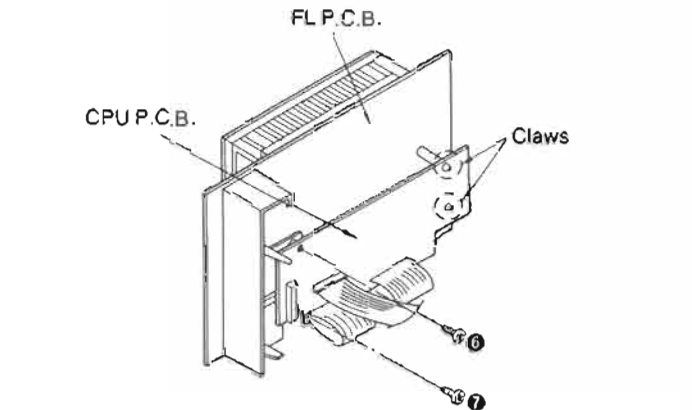
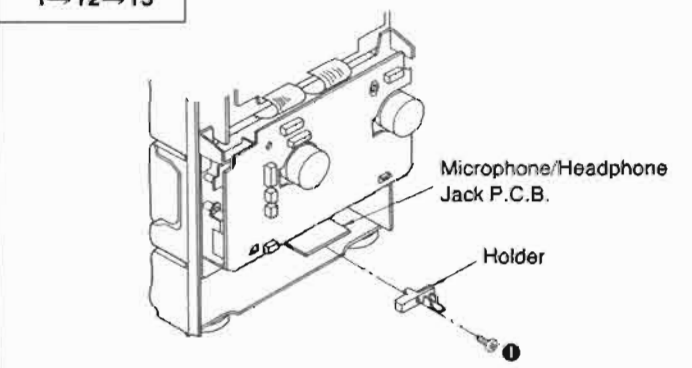
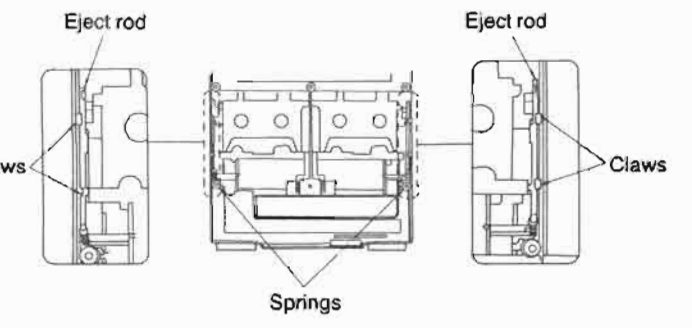
1. Remove the 3 connectors (CN501, CN502, CP790A).
2. Remove the flat cable (CN702).



3. Remove the 3 screws (①~③).
4. Remove the Main P.C.B. in the direction of arrow ①.
5. Remove the Main P.C.B. in the direction of arrow ②.

Ref. No. 4	Removal of the Heat Sink Cover	 <p>1. Remove the 3 screws (①~③).</p> <p>2. Remove the claw.</p>	
Procedure 1→4			
Ref. No. 5	Removal of the POWER AMP P.C.B.	  <p>2. Remove the flat cable (CN504).</p> <p>3. Push the 2 claws in the direction of the arrow ① and then remove the POWER AMP P.C.B.</p> <p>4. Remove the hook and then remove the Main P.C.B. in the direction of the arrow ②.</p>	
Procedure 1→5			
Ref. No. 6	Removal of the Power IC and Regulator Transistor	Ref. No. 7	Removal of the P.C.B. Angle
Procedure 1→6	<p>1. Unsolder the Power IC and Regulator Transistor.</p> <p>2. Remove the 4 screws (①~④).</p>  <p>●When mounting the Power IC and regulator transistor, apply silicone compound (RFKX0002) to the rear side of Power IC and regulator transistor.</p>	Procedure 1→2→3→ 4→5→7	 <p>1. Remove the screw (①).</p> <p>2. Remove the P.C.B. angle in the direction of the arrow.</p>

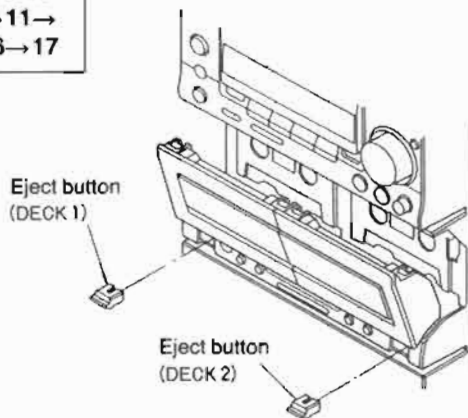
Ref. No. 8	Removal of the Power P.C.B.	Ref. No. 9	Removal of the Rear Panel
Procedure 1→2→3→ 4→5→8	 <p>1. Remove the 3 screws (①~③).</p> <p>2. Unsolder the transformer.</p>	Procedure 1→2→3→ 4→5→7→9	 <p>1. Remove the 3 screws (①~③).</p> <p>2. Remove the hook of rear panel and then remove the rear panel in the direction of the arrow.</p>
Ref. No. 10	Removal of the Power Transformer	Ref. No. 11	Removal of the Mechanism Control P.C.B.
Procedure 1→2→3→ 4→5→7→ 8→9→10	 <p>1. Remove the 4 screws (①~④).</p> <p>2. Remove the Power Transformer in the direction of the arrow.</p>	Procedure 1→2→11	 <p>1. Remove the 2 connectors (CP101, CP102).</p> <p>2. Remove the 6 flat cables (CN201, CN202, CN203, CN204, CN205, CN206).</p>
Ref. No. 12	Removal of the Mechanism Unit		
Procedure 1→2→11→12	 <p>1. Remove the 6 screws (①~⑥).</p> <p>2. Remove the 2 claws.</p> <p>3. Remove the 2 screws (①, ②).</p> <p>4. Remove the mechanism control P.C.B. in the direction of the arrow and then remove the 2 hooks.</p>		

<p>Ref. No. 13</p>	<p>Removal of the FL P.C.B. and CPU P.C.B.</p>		
<p>Procedure 1→2→11→ 12→13</p>	<ol style="list-style-type: none"> 1. Pull out the 2 knobs (Volume and AI JOG Knob). 2. Remove the 2 nuts. 3. Remove the 5 screws (①~⑤). 4. Remove the FL P.C.B. in the direction of the arrow. 		<ol style="list-style-type: none"> 5. Remove the 2 screws (⑥, ⑦). 6. Remove the 2 claws and the Remove the CPU P.C.B.
<p>Ref. No. 14</p>	<p>Removal of the Operation P.C.B.</p>	<p>Ref. No. 15</p>	<p>Removal of the Microphone/Headphone Jack P.C.B.</p>
<p>Procedure 1→2→11→ 12→13→14</p>			<p>Procedure 1→12→15</p> 
<p>Ref. No. 16</p>	<p>Removal of the Eject rod (DECK 1 & Deck 2)</p>		
<p>Procedure 1→2→12→16</p>	<ol style="list-style-type: none"> 1. Press the eject buttons (DECK 1, 2). 		<ol style="list-style-type: none"> 2. Remove the 2 springs (DECK 1, 2). 3. Remove the 4 claws and then remove the eject rod.

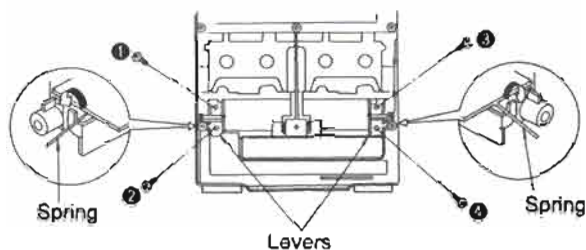
Ref. No.
17

Removal of the Eject lever (DECK 1 & DECK 2)

Procedure
1→2→11→
12→16→17



1. Pull out the eject buttons (DECK 1, 2).

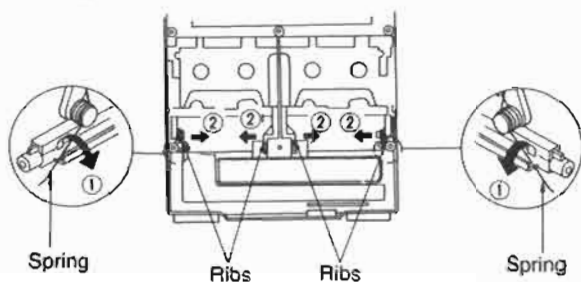


2. Remove the 2 springs in the direction of the arrow.
3. Remove the 4 screws (①~④).

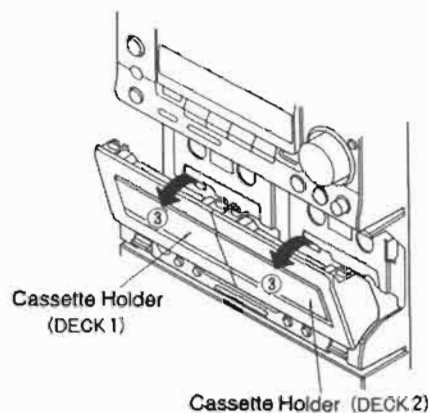
Ref. No.
18

Removal of the Cassette Holder (DECK 1 & DECK 2)

Procedure
1→2→11→
12→16→
17→18



1. Remove the 2 springs in the direction of the arrow ①.
2. Push the ribs in the direction of the arrow ②.

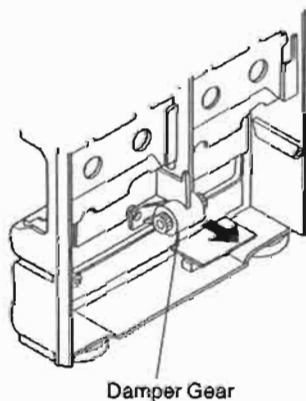


3. Remove the cassette holder in the direction of the arrow ③.

Ref. No.
19

Removal of the Damper Gear

Procedure
1→2→11→
12→16→17→
18→19

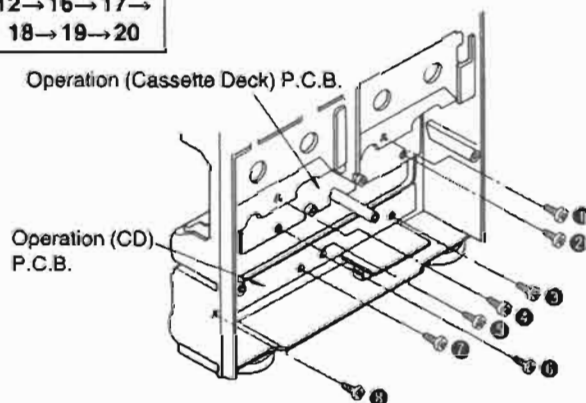


● Pull out the damper gear in the direction of the arrow.

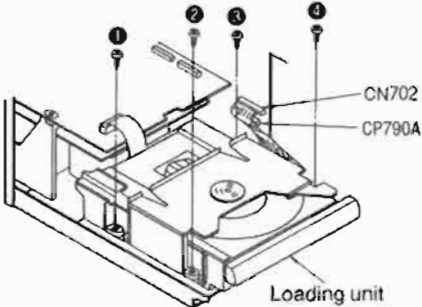
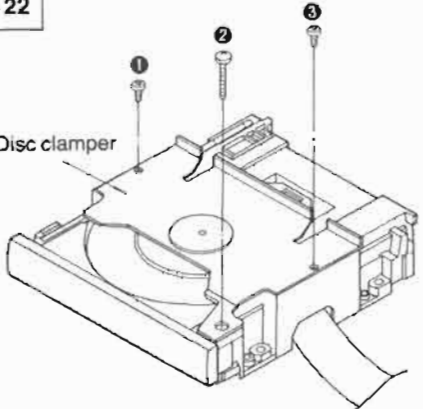
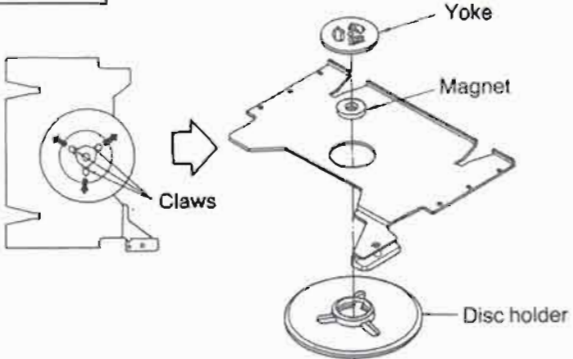
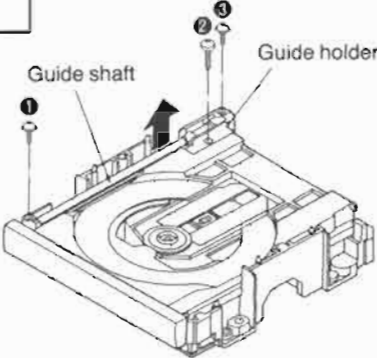
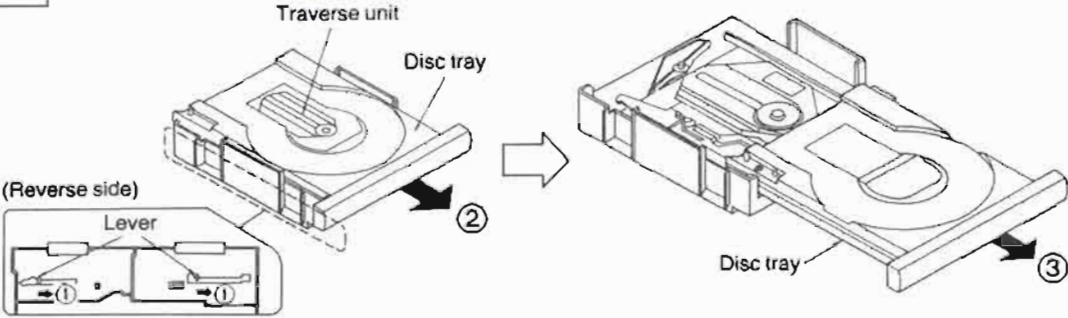
Ref. No.
20

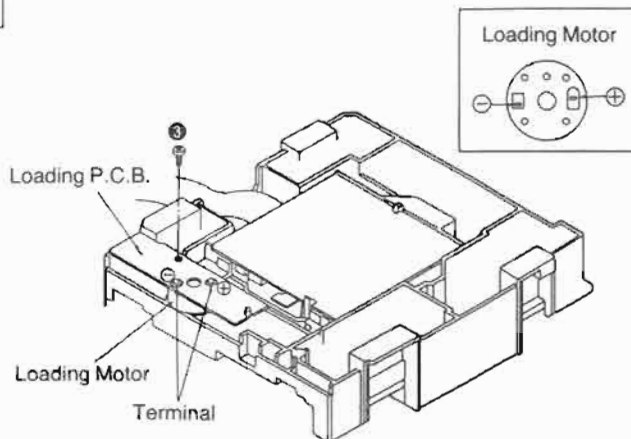
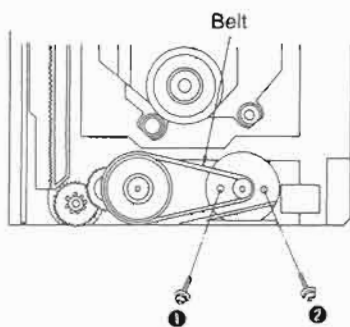
Removal of the Operation (Cassette Deck and CD) P.C.B.

Procedure
1→2→11→
12→16→17→
18→19→20



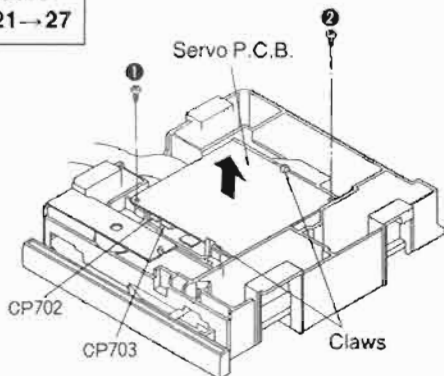
● Remove the 8 screws (①~⑧).

Ref. No. 21	Removal of the Loading Unit	Ref. No. 22	Removal of the Disc Clamper
Procedure 1→2→21	 <p>1. Remove the flat cable (CN702). 2. Remove the connector (CP790A). 3. Remove the 4 screws (①~④).</p>	Procedure 1→2→21→22	 <p>• Remove the 3 screws (①~③).</p>
Ref. No. 23	Removal of the Magnet and Holder	Ref. No. 24	Removal of the Guide Shaft and Guide Shaft Holder
Procedure 1→2→21→ 22→23	 <p>• Remove the 3 claws.</p>	Procedure 1→2→21→ 22→23	 <p>1. Remove the 3 screws (①~③). 2. Remove the guide shaft and guide shaft holder in the direction of the arrow.</p>
Ref. No. 25	Removal of the Disc Tray		
Procedure 1→2→21→ 22→24→25	 <p>1. Move the lever in the direction of arrow ① until the traverse unit goes down and the disc tray slightly in the direction of the ②. 2. Remove the disc tray in the direction of the arrow ③.</p>		

Ref. No. 26
Removal of the Loading P.C.B. and Loading Motor
Procedure
 1→2→21→22→
 24→25→26


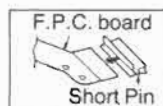
1. Remove the belt.
2. Remove the 2 screws (1-2).

3. Remove the screw (3).
4. Unsolder the 2 terminals of loading motor.

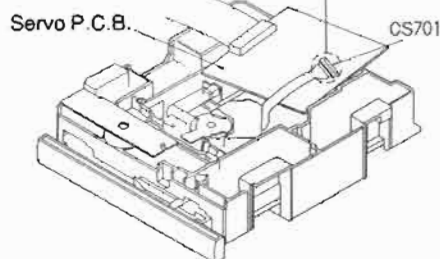
Ref. No. 27
Removal of the Servo P.C.B.
Procedure
 1→2→21→27


1. Remove the 2 screws (1, 2).
2. Remove the 2 claws.
3. Remove the servo P.C.B. in the direction of the arrow.

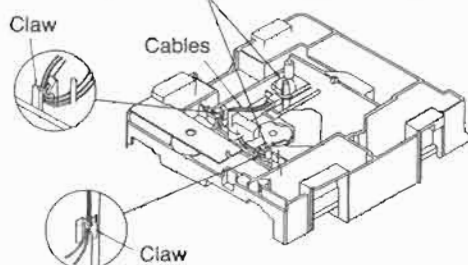
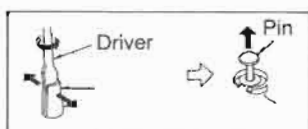
• Removal of the F.P.C. board
 Push the top of the connector in the direction of the arrow ①, and then Pull Out the flat cable in the direction of the arrow ②.



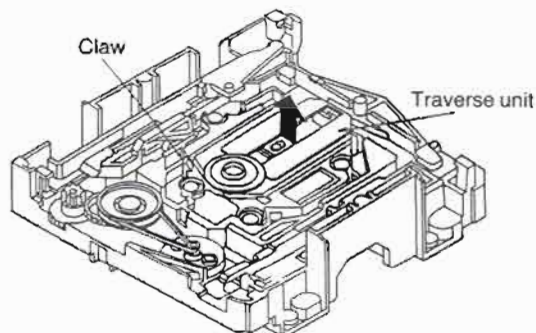
Note:
 Insert a short pin into the traverse deck's F.P.C. board.



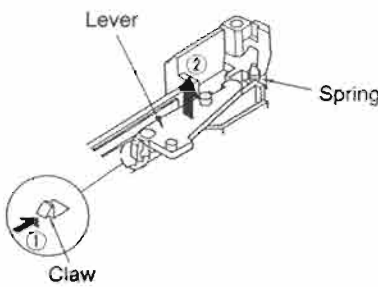
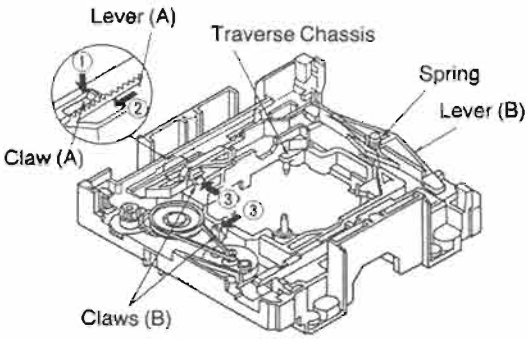
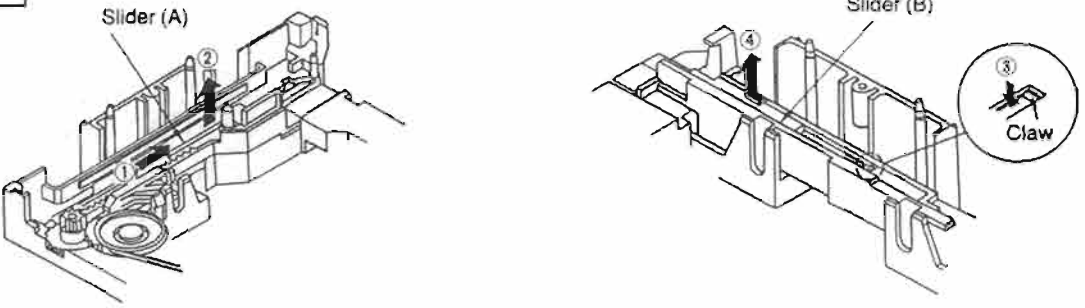
4. Remove the 2 connectors (CP702, CP703).
5. Remove the F.P.C. Board (CS701).

Ref. No. 28
Removal of the Traverse Unit
Procedure
 1→2→21→22→
 24→25→27→28


1. Release the cables from the code clammers.
2. Remove the 2 pin in the direction of the arrow.

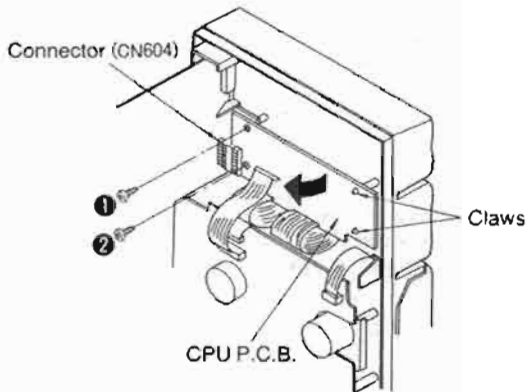


3. Remove the claw and remove the traverse unit in the direction of the arrow.

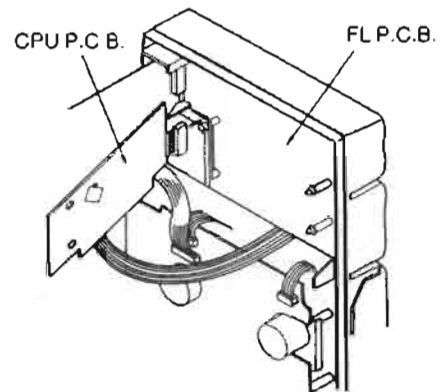
Ref. No. 29	Removal of the Lever	
Procedure 1→2→21→22→ 24→25→29	<ol style="list-style-type: none"> 1. Remove the spring. 2. Remove the claw in the direction of the arrow ① and then remove the lever in the direction of the arrow ②. 	
Ref. No. 30	Removal of the Traverse Chassis	
Procedure 1→2→21→22→ 24→25→27→ 28→29→30	<ul style="list-style-type: none"> ■ Remove the traverse chassis. <ol style="list-style-type: none"> 1. Push the claw (A) in the direction of arrow ①, and then move the slider (A) in the direction of the arrow ②. 2. Push 2 claws (B) in the direction of arrow ③, and then remove the traverse chassis. ■ Remove the lever (B) <ol style="list-style-type: none"> 1. Push the claw (A) in the direction of the arrow ①, and then move the lever (A) in the direction of the arrow ②. 2. Remove the spring. 3. Remove the lever (B) in the direction of the arrow ④. 	
Ref. No. 31	Removal of the Slider (A) and Slider (B)	
Procedure 1→2→21→22→ 24→25→27→28→ 29→30→31	<ul style="list-style-type: none"> ■ Removal of the Slider (A) <ul style="list-style-type: none"> ● Move the slider (A) in the direction of the arrow ①, and remove the slider (A) in the direction of the arrow ②. ■ Removal of the slider (B) <ul style="list-style-type: none"> ● Push the claw in the direction of the arrow ③, and remove the slider (B) in the direction of the arrow ④. 	

Ref. No. 32
Check of the F.L.P.C.B. and CPU P.C.B.

Procedure
 1→11



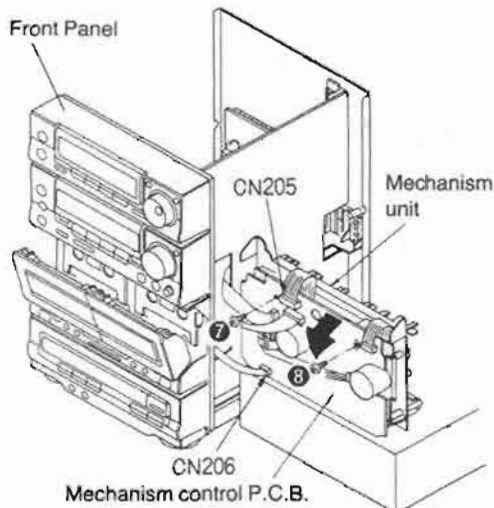
1. Remove the 2 screws (①, ②).
2. Remove the 2 claws.
3. Move the CPU P.C.B. in the direction of the arrow.



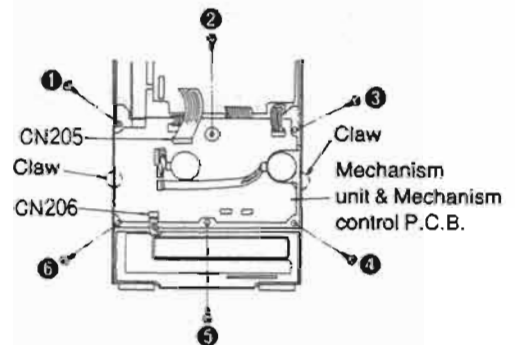
4. When checking the soldered surface of the P.C.B. (FL and CPU) and replacing the parts, do as shown in the Figure above.

Ref. No. 33
Check of the Mechanism Control P.C.B.

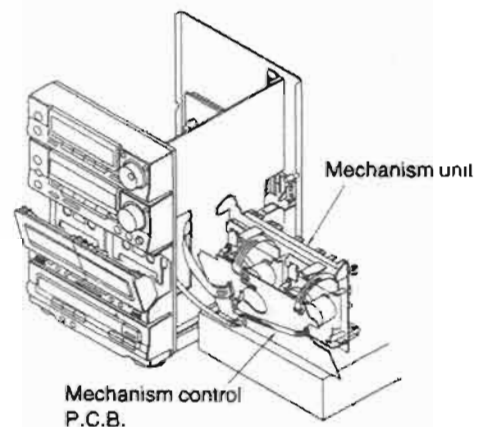
Procedure
 1→2→33



4. Reinstall the front panel to the body and connect the flat cable (CN205, CN505) and connector (CN206, CN604).
5. Place the mechanism unit sideways as shown in Figure.
6. When checking the component side of the mechanism control P.C.B. and replacing the parts, do as shown in the Figure above.
7. Remove the screw (⑦), and then move the mechanism control P.C.B. in the direction of the arrow ⑧.



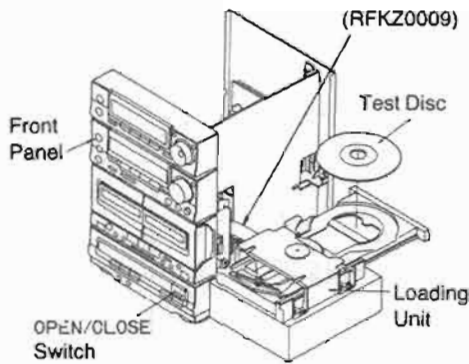
1. Remove the 6 screws (①-⑥).
2. Remove the 2 flat cable (CN205, CN206).
3. Remove the 2 claws and remove the mechanism unit and mechanism control P.C.B.



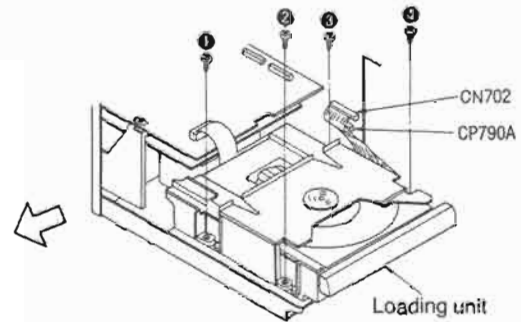
8. When checking the soldered surface of the mechanism control P.C.B., do as shown in the Figure above.

Ref. No.
34

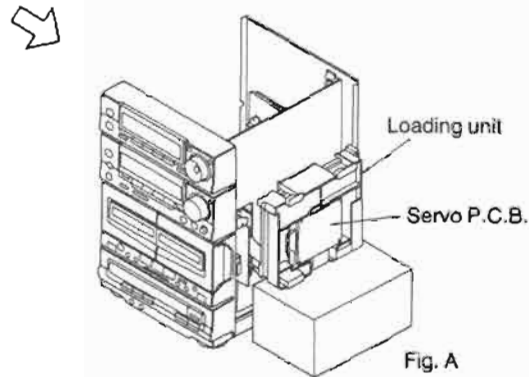
Check of the Servo P.C.B.

Procedure
1→2→34

4. Reinstall the front panel to the body and connect the flat cable (CN505, CN702) and connector (CP790A).
5. Place the loading unit sideways as shown in Figure.
6. Set the test disc.
7. Detach the loading unit as shown in Fig. A.
8. When checking the soldered surface of the servo P.C.B.



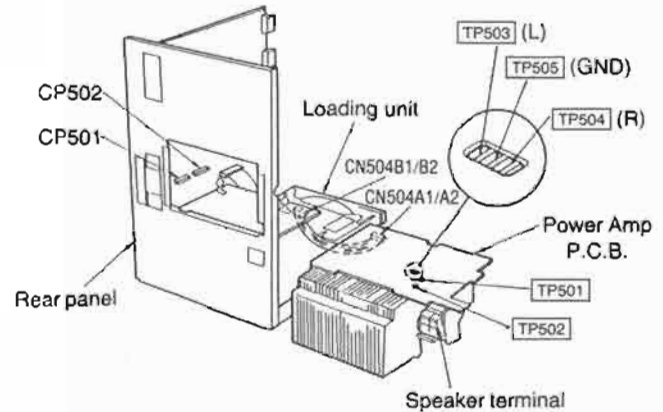
1. Remove the flat cable (CN702).
2. Remove the connector (CP790A).
3. Remove the 4 screws' (①~④), and remove the loading unit.

Ref. No.
35

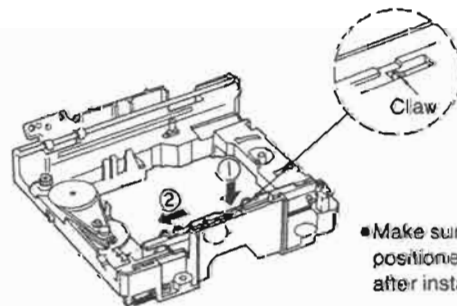
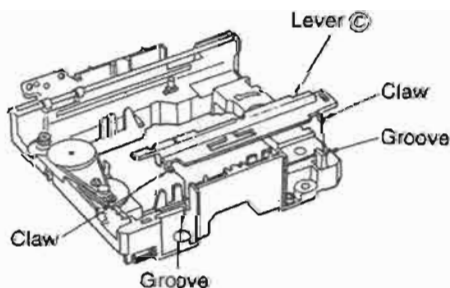
Check of the POWER AMP P.C.B.

Procedure
1→2→4→
5→35

1. Remove the 2 connectors (CP501, CP502).
2. Place the POWER AMP P.C.B. as shown in Figure and connect the 2 connectors (CN504B1/B2, CN504A1/A2).
3. Connect jumper wire between TP501 and TP502.
4. Apply a AF signal to TP503 (Lch) or TP504 (Rch) and TP505 (GND) by using a AF OSC.
5. When checking the soldered surface of the POWER AMP P.C.B. do as shown in the Figure.



■ CD UNIT ASSEMBLY

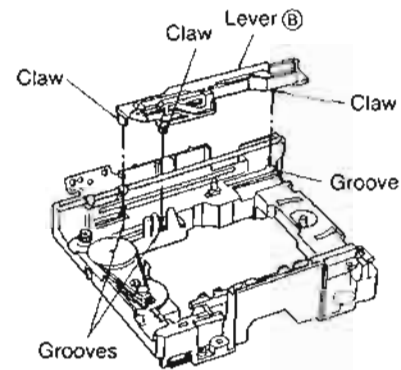


1. Install Lever (C) on the chassis by fitting the claws of Lever (C) in the two grooves of the chassis.

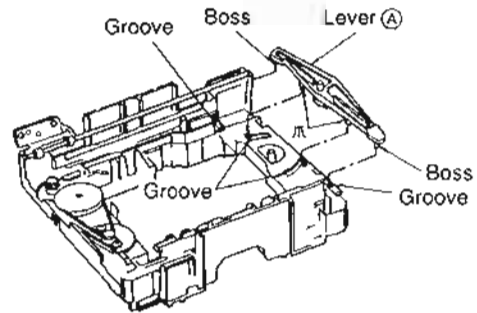
2. Slide Lever (C) in the direction of arrow (2) while keeping it held down lightly in the direction of arrow (1).

• Make sure that the claw is positioned as shown above after installing Lever (C).

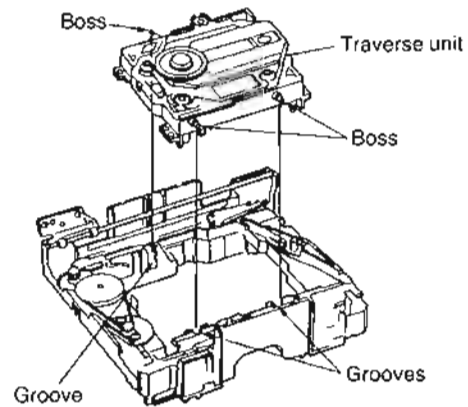
■ INSTALLING DISC TRAY



3. Install Lever B on the chassis by fitting the claws of Lever B in the three grooves of the chassis as shown above.

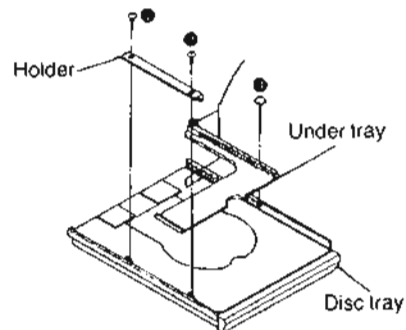


6. Install Lever A on the chassis by fitting the two claws of Lever A in the two grooves of the chassis and the two bosses in the two grooves as shown above.

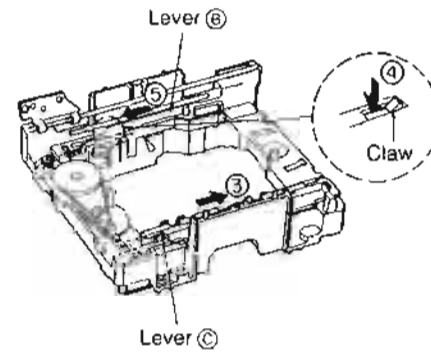


9. Install the traverse unit on the chassis by fitting the three bosses of the traverse unit in the three grooves of the chassis

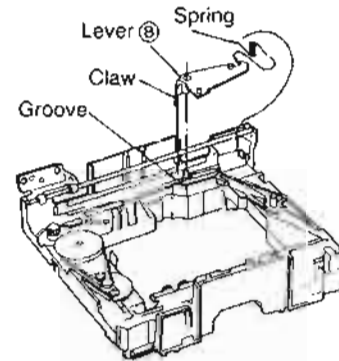
■ INSTALLING DISC TRAY UNIT



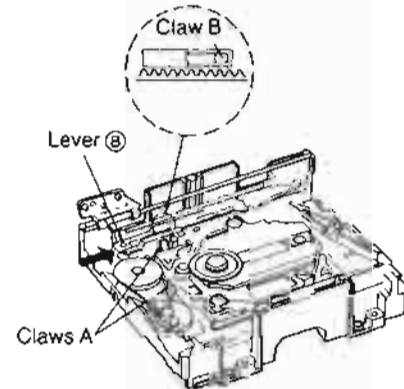
1. Install the under tray on the disc tray
2. Install the holder on the disc tray with the two screws 1 and 2.
3. Screw the under tray on the disc tray 3. Make sure that the under tray moves smoothly after installing the disc tray unit.



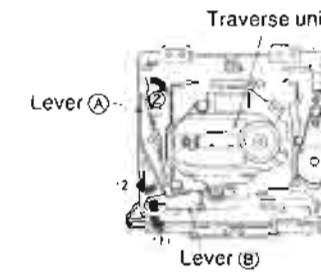
4. Slide Lever C fully in the direction of arrow 3
5. Keep holding down the claw in the direction of arrow 4 and slide Lever B in the direction of arrow 5 to stop. (Slide but very little.)



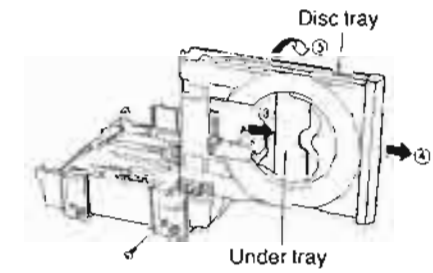
7. Install Lever B on the chassis by fitting the claw of Lever B in the groove of the chassis.
8. Install the spring on Lever B and the chassis.



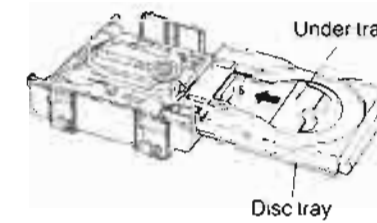
10. Make sure that the traverse unit is engaged with the two claws A.
11. Slide Lever B in the direction of the arrow. Be sure to check if claw B is set as shown above. (Slide Lever B but very little.)



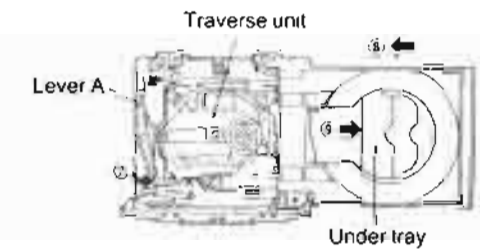
1. Move Lever B in the direction of arrow 1 and Lever A in the direction of arrow 2. (The traverse unit rises.)



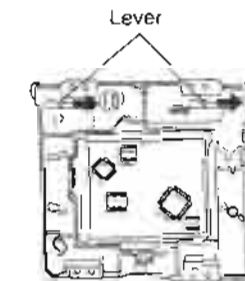
2. Screw the disc tray on the slider as shown above.
3. Slide the under tray fully in the direction of arrow 3.
4. Slide the disc tray fully in the direction of arrow 4.
5. Lay the disc tray down in the direction of arrow 5.



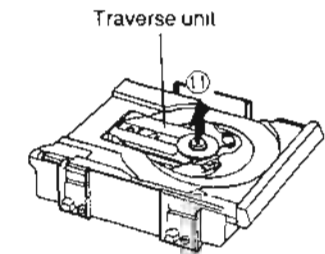
6. Slide the under tray in the direction of arrow 6.
7. Hold the disc tray and slide the under tray fully in the direction of arrow 6. (Slide but very little and the loading gear is engaged with disc tray gear.)



8. Move Lever A in the direction of arrow 7. (The traverse unit is lowered.)
9. Slide the disc tray in the direction of arrow 8. (Make sure that the under tray is moved in the direction of arrow 9.)



10. Slide the lever in the direction of arrow 10 and check if the traverse unit rises in the direction of arrow 11.



MEASUREMENTS AND ADJUSTMENTS

Adjustment Points

Tuner

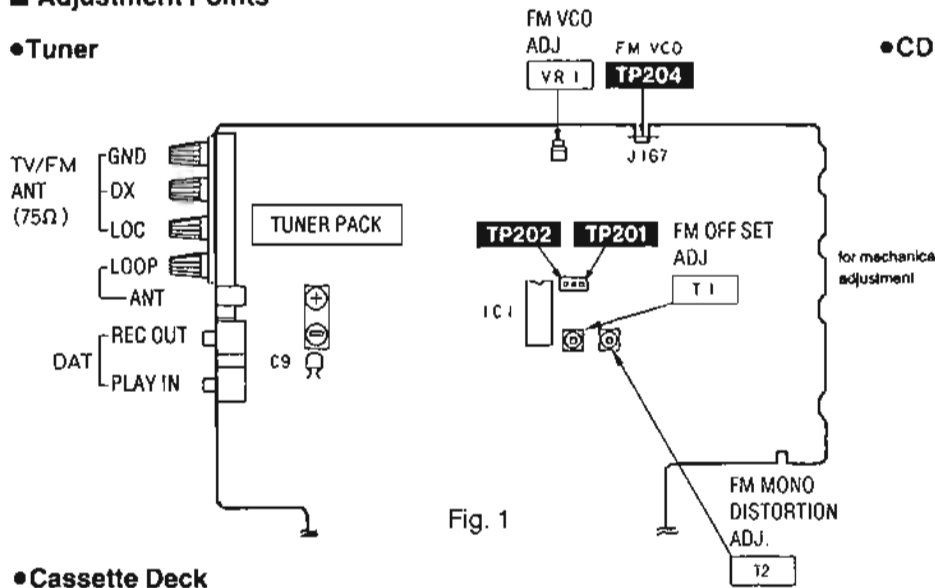


Fig. 1

Cassette Deck

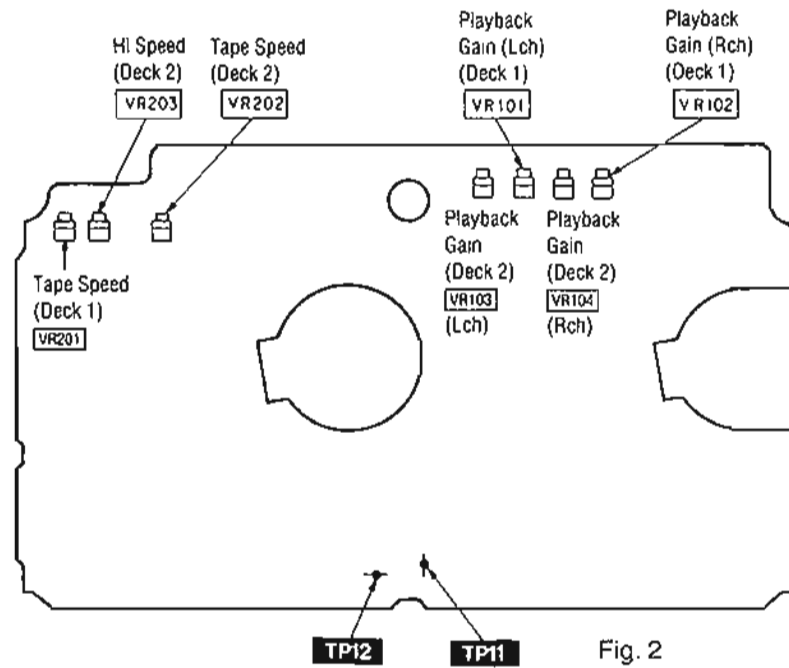


Fig. 2

Measurement Condition

- Rec. level control; Maximum
- Reverse-mode selector switch; $\overline{\text{II}}$
- Edit-recording tape-speed selector; NORMAL
- Timer-recording switch; off

Measuring Instrument

- EVM (Electronic Voltmeter)
- Oscilloscope
- Digital frequency counter
- AF oscillator

Test tape

- Head azimuth adjustment (8 kHz, -20 dB); QZZCFM
- Tape speed adjustment (3 kHz, -10 dB); QZZCWAT
- Playback frequency response (315 Hz, 12.5 kHz, 10 kHz, 8 kHz, 4 kHz, 1 kHz, 250 Hz, 125 Hz, 63 Hz, -20 dB); QZZCFM

- Dolby NR switch; Off
- Make sure heads are clean
- Make sure capstan and pressure roller are clean
- Judgeable room temperature $20 \pm 5^\circ\text{C}$ ($68 \pm 9^\circ\text{F}$)

- ATT (Attenuator)
- DC voltmeter
- Resistor (600Ω)

- Playback gain adjustment (315 Hz, 0 dB); QZZCFM
- Overall frequency response, Overall gain adjustment Normal reference blank tape; QZZCRA
CrO₂ reference blank tape; QZZCRX
Metal reference blank tape; QZZCRZ

CD

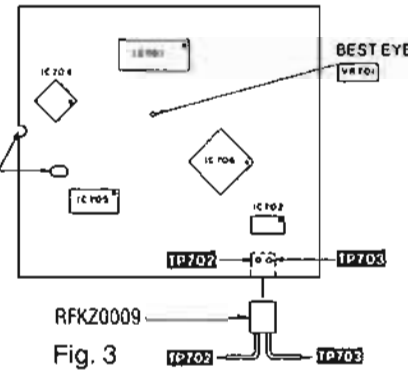


Fig. 3

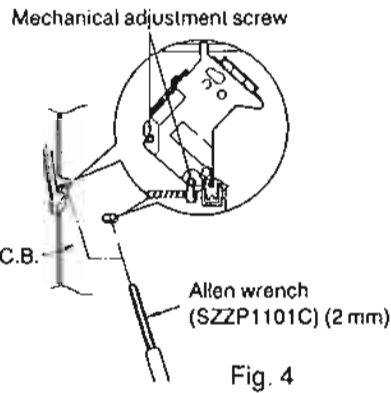


Fig. 4

FM ADJUSTMENT

Control positions and equipment used

- FM signal generator (FM-SG)
- Stereo modulator
- Distortion analyser
- DC electronic voltmeter (EVM)
- Frequency counter
- Choke coil (100 μH)
- Resistor (100 kΩ)

Note: For Z201 (AM ANT and OSC coil), Z202 (AM-IFT) and Z251 they are supplied as adjusted parts. So, do not turn the cores of the parts. If is not necessary to adjust the AM circuit.

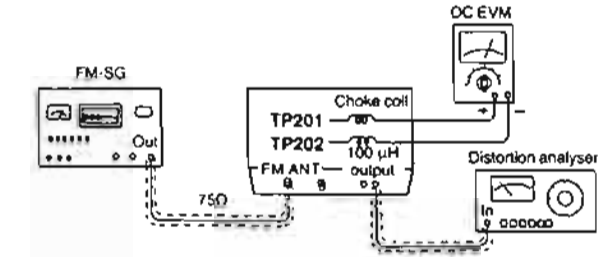
FM OFFSET VOLTAGE AND MONO DISTORTION ADJUSTMENT

1. Test equipment connection is shown in figure.
2. Set the unit to "FM" mode.
3. Set the radio frequency display and signal generator to 100.10 MHz.
4. Adjust the core T1 so that the voltage measured in signal mode is 0 mV (0 ± 20 mV) in 300 mV range.
5. Adjust T2 so that the distortion factor of L-CH and R-CH is minimized.
6. Repeat steps 4 and 5.

Note: The adjusting screwdriver used should be made of resin.

FM SIGNAL GENERATOR CONDITION

- Modulation 100%
- Modulation frequency 1 kHz
- Output level 66 dB



FM MPX VCO ADJUSTMENT

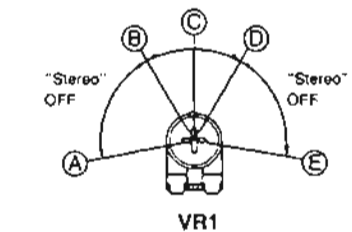
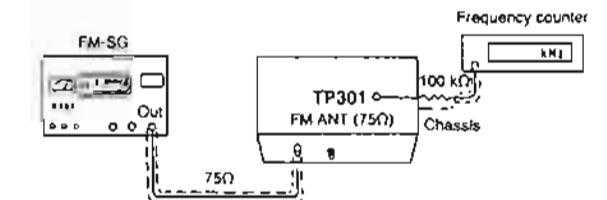
1. Test equipment connection is shown in figure.
2. Set the unit to "stereo" position.
3. Set the radio frequency display and signal generator to 100.10 MHz.
4. Adjust VR301 for 19 kHz ± 30 Hz on frequency counter reading.

USING ALTERNATE SYSTEM

1. Receive the stereo broadcast.
2. Adjust VR1 until stereo indicator lights up. Fix the arm of VR1 as shown in figure.

FM SIGNAL GENERATOR CONDITION

- Modulation 100%
- Modulation frequency 0 kHz
- Output level 66 dB



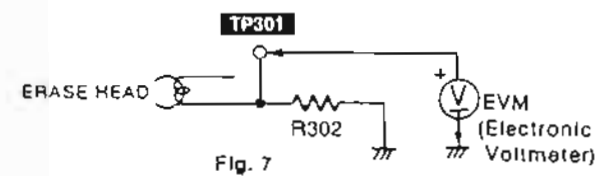
- (A)-(B)
- (D)-(E) "Stereo" OFF position
- (B)-(D) "Stereo" ON position (Indicator lighting)
- (C) Adjust point of pilot circuit

TAPE ADJUSTMENT

ERASE CURRENT ADJUSTMENT (DECK 2)

1. Insert the Metal blank test tape (QZZCRZ) and set the unit to the Record Pause mode.
2. Adjust VR301 so that the output between TP301 and TP302 (GND) (the output on both edges of R302) is within the standard value.

Standard value: 190 mA \pm 5 mA (Metal)

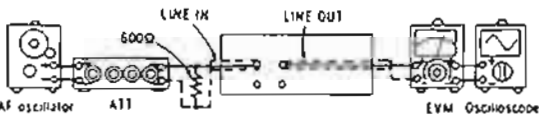


OVERALL FREQUENCY RESPONSE (DECK 2)

1. Insert the Normal blank test tape (QZZCRA) and set the unit to the Record Pause mode.
2. Apply a reference input signal (1 kHz, -24 dB) through an attenuator.
3. Attenuate the signal by 20dB and adjust the frequency from 50Hz~10kHz.
4. Record the frequency sweep.
5. Playback the recorded signal and assure that it is within the range shown in Fig. 8 in comparison to the reference frequency (1 kHz).
6. If it is not within the standard range, adjust VR302 (L-CH) and VR303 (R-CH) so that the frequency level is within the standard range.

- Level up in high frequency range Increase the bias current.
- Level down in high frequency range Decrease the bias current.

7. Repeat steps 2~6 above using the CrO₂ tape (QZZCRX) and the Metal tape (QZZCRZ) increasing the frequency range to 12.5kHz (50Hz~12.5kHz).
8. Assure that the level is within the range shown in Fig. 9.

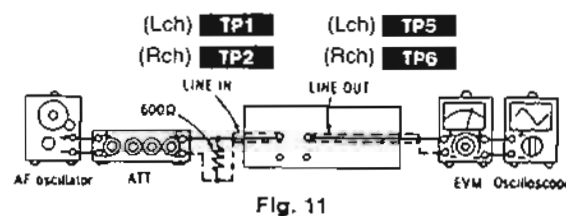


LINE IN (Lch): TP1 (Rch): TP2
LINE OUT (Lch): TP5 (Rch): TP6

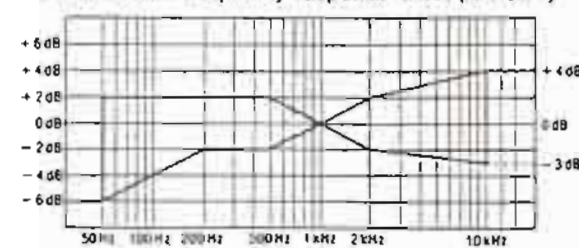
OVERALL GAIN ADJUSTMENT (DECK 2)

1. Insert the Normal blank test tape (QZZCRA) and set the unit to the Record pause mode.
2. Apply a reference input signal (1kHz, -19dB). Attenuate the output so that its level becomes 0.4V.
3. Record this input signal.
4. Playback the signal recorded in step 3 above, and assure that the output is within the standard value.

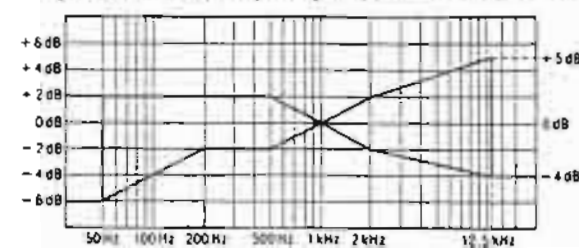
Standard value: 0.4V \pm 0.5dB



Normal Overall frequency response chart (NR OUT)



CrO₂ Metal Overall frequency response chart (NR OUT)

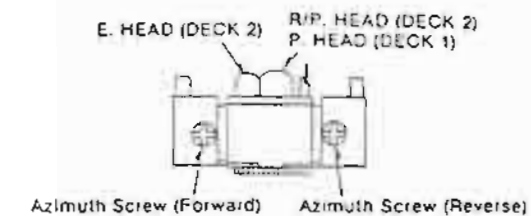
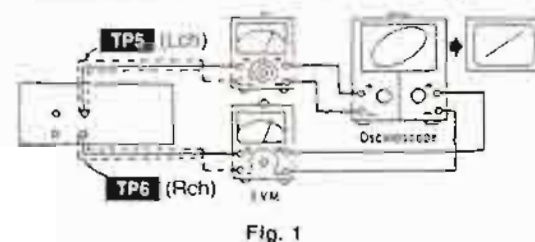


HEAD AZIMUTH ADJUSTMENT (DECK 1/2)

1. Playback the azimuth adjustment portion (8kHz, -20dB) of the test tape (QZZCFM). Vary the azimuth adjusting screw until the outputs of the L-CH and R-CH are maximized and the lissajous waveform, as illustrated, approaches 0 degrees.

Note: If L-CH and R-CH are not maximized at the same point, adjust to the point where the levels of each channel are maximized and equal.

2. Perform the same adjustment in the play mode.
3. After the adjustment, apply screwlock to the azimuth adjusting screw.



TAPE SPEED ADJUSTMENT (DECK 1/2)

Normal speed

1. Shift the edit-recording tape-speed selector to "NORMAL".
2. Playback the middle portion of the test tape (QZZCWAT).
3. Adjust Deck 1=VR201 and Deck 2=VR202 so that the output is within the standard value.

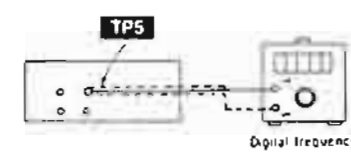
Standard value: 3000 \pm 15 Hz (NORMAL speed)

High speed [Set the unit to forward (FWD) mode.]

4. Push the edit speed button (SPEED). This will set the high speed mode.
5. Playback the middle portion on the test tape (QZZCWAT).
6. At that time, check if the output from DECK 1 is within the standard value.

Standard value: 5,000 \pm 600 Hz (HIGH speed)

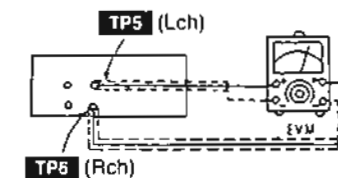
7. Adjust VR203 so that the output frequency of DECK 2 is within \pm 30 Hz of the value of the output frequency of DECK 1.



PLAYBACK GAIN ADJUSTMENT (DECK 1/2)

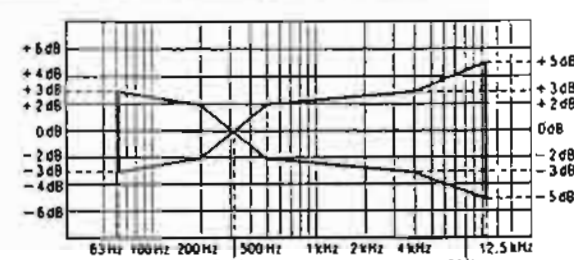
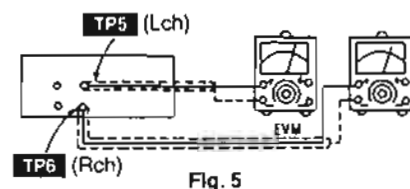
1. Playback the gain adjusted portion (315Hz, 0dB) of the test tape (QZZCFM).
2. Adjust Deck 2=VR103 (L-CH) ([VR104 (R-CH)]) and Deck 1=VR101 (L-CH) ([VR102 (R-CH)]) so that the output is within the standard value.

Standard value: 400 mV \pm 0.5 dB



PLAYBACK FREQUENCY RESPONSE (DECK 1/2)

1. Playback the frequency response portion (315Hz, 12.5kHz~63Hz, -20dB) of the test tape (QZZCFM).
2. Assure that the frequency response is within the range shown in Fig. 6 for both L-CH and R-CH.



CD ADJUSTMENT

Caution:

- It is very dangerous to look at or touch the laser beam. (Laser radiation is invisible.)
- With the unit turned "on", laser radiation is emitted from the pickup lens.
- Avoid exposure to the laser beam, especially when performing adjustments.

Measuring Instruments and Special Tools

- Test disc
 1. Playability test disc (SZZP1054C)
 2. Uneven test disc (SZZP1056C)

- Allen wrench (M2.0) (SZZP1101C)
- Oscilloscope

(1) MECHANICAL ADJUSTMENT

- When the traverse deck is replaced, making adjustments is not necessary. (The traverse deck ass'y is already adjusted.)

- Make adjustments to improve playability when the traverse deck has not been replaced. Make the electrical adjustments first.

1. Connect the oscilloscope's CH. 1 probe across TP702 (+) and TP703 (V-REF) on the Servo P.C.B.

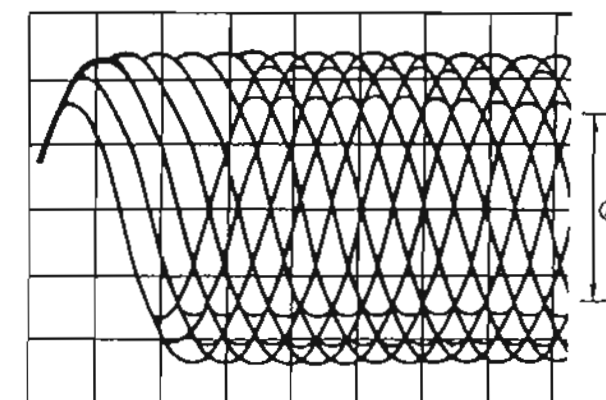
Oscilloscope setting:

VOLT 200 mV
SWEEP 0.5 μ sec
Input coupling AC

2. Switch the player power ON, and play track 19 on the test disc (SZZP1056C).
3. Leave the player in Play mode and place it as shown in the figure on the right.

4. Alternately adjust the two mechanical adjusting screws with the 2.0 mm allen wrench (SZZP1101C) until the RF signal amplitude variation on the oscilloscope is minimized. (Shown in Fig. 2)

5. After completing the adjustment, lock the mechanical adjustments with lock paint (RZZOL01).



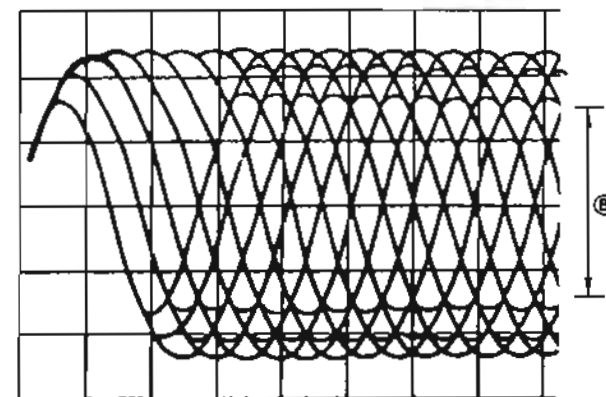
(2) BEST EYE (PD BALANCE) ADJUSTMENT

1. Connect the oscilloscope's CH. 1 probe across TP702 (+) and TP703 (V-REF) on the Servo P.C.B.

Oscilloscope setting:

VOLT 200 mV
SWEEP 0.5 μ sec
Input coupling AC

2. Switch the player power ON, and play the 1 kHz (track 1) on test disc (SZZP1054C).
3. Adjust VR701 until the RF signal eye pattern amplitude is maximized.



(3) CHECK OF PLAY OPERATION AFTER ADJUSTMENT

Checking Skip Search

1. Play an ordinary musical program disc.
2. Press the skip button to check for normal skip search operation (in both the forward and reverse directions).

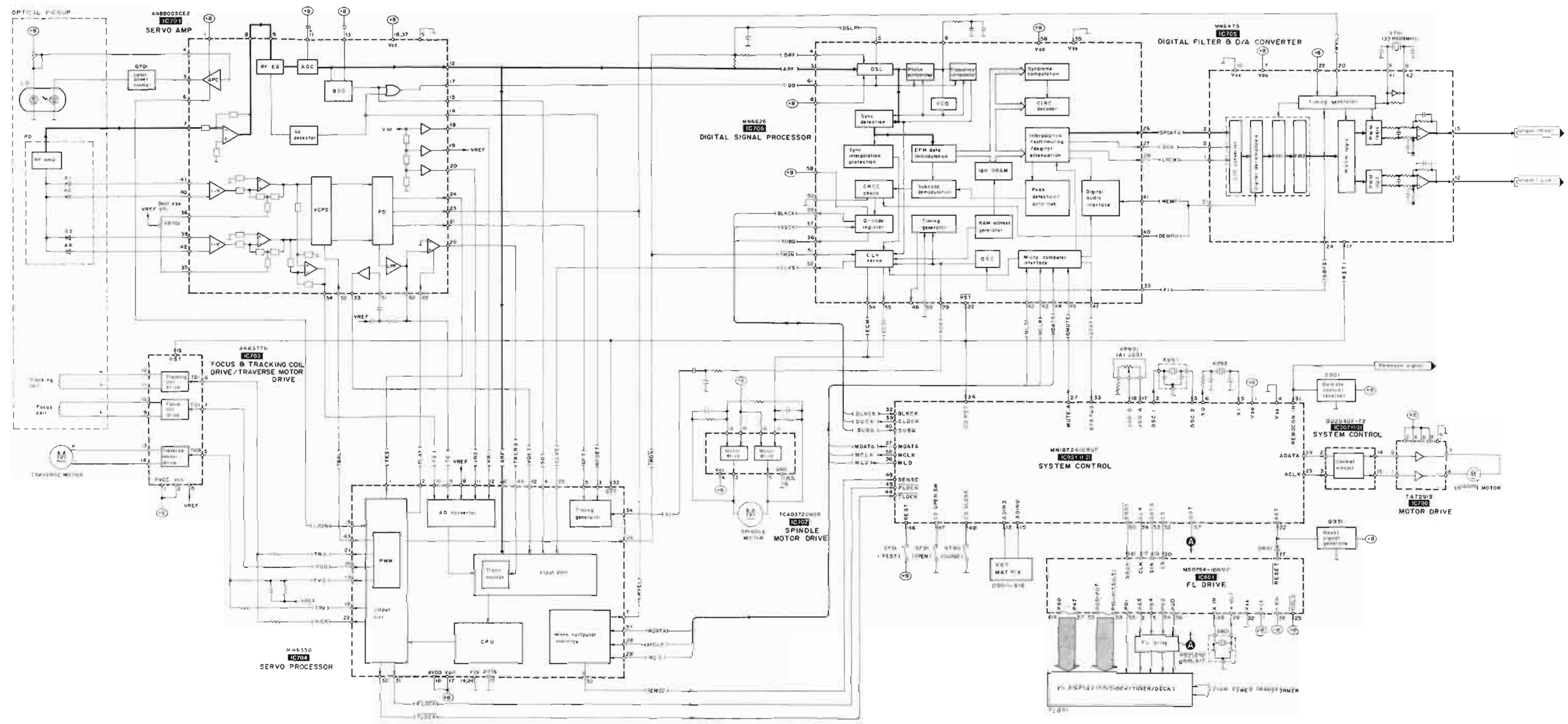
Checking Manual Search

1. Play an ordinary musical program disc.
2. Press the manual search button to check for smooth manual search operations at either low or high speed (in both the forward and reverse directions).

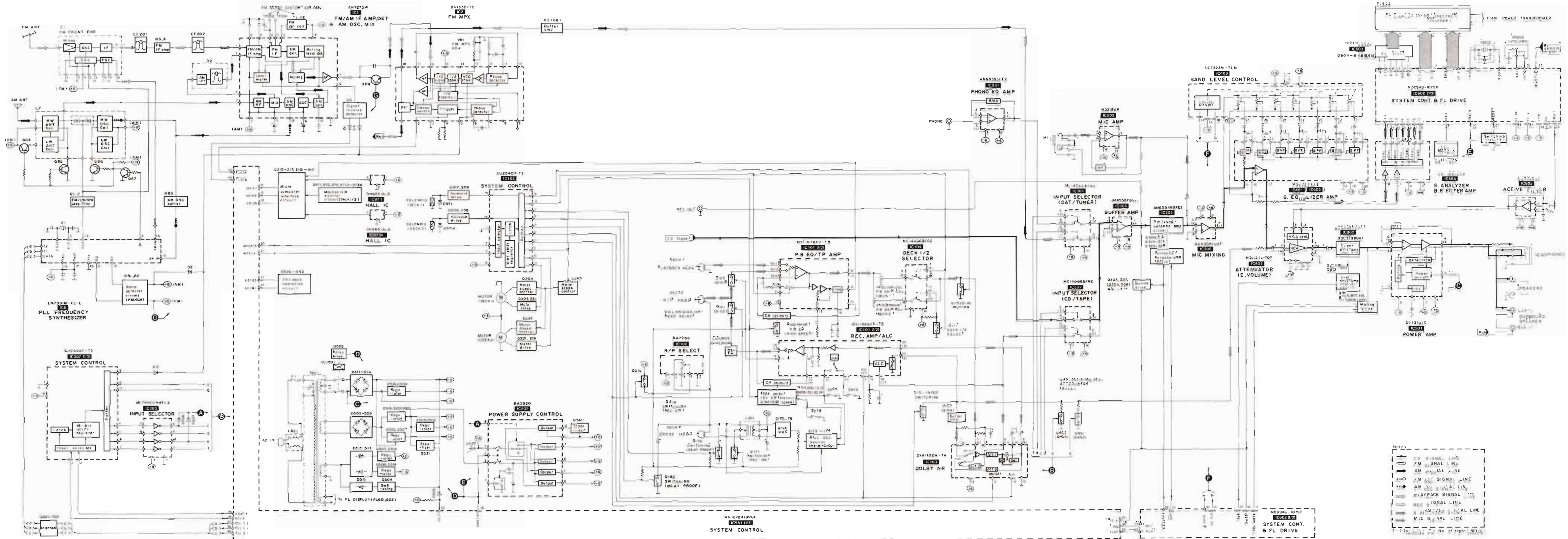
Checking Playability

1. Play the 0.7 mm black dot and the 0.7 mm wedge on the test disc (SZZP1054C) and verify that no sound skip or noise occurs.
2. Play the middle tracks of the uneven test disc and verify that no sound skip or noise occurs.

■ BLOCK DIAGRAM (CD)



■ BLOCK DIAGRAM (MAIN)



SCHEMATIC DIAGRAM (POWER AMP AND MAIN)

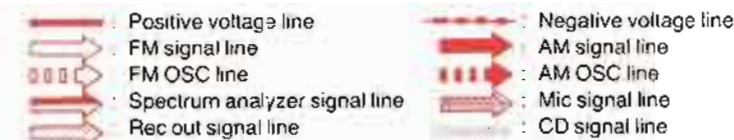
Notes:

• Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

Important safety notice:

Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

• This schematic diagram may be modified at any time with the development of new technology.



Caution!

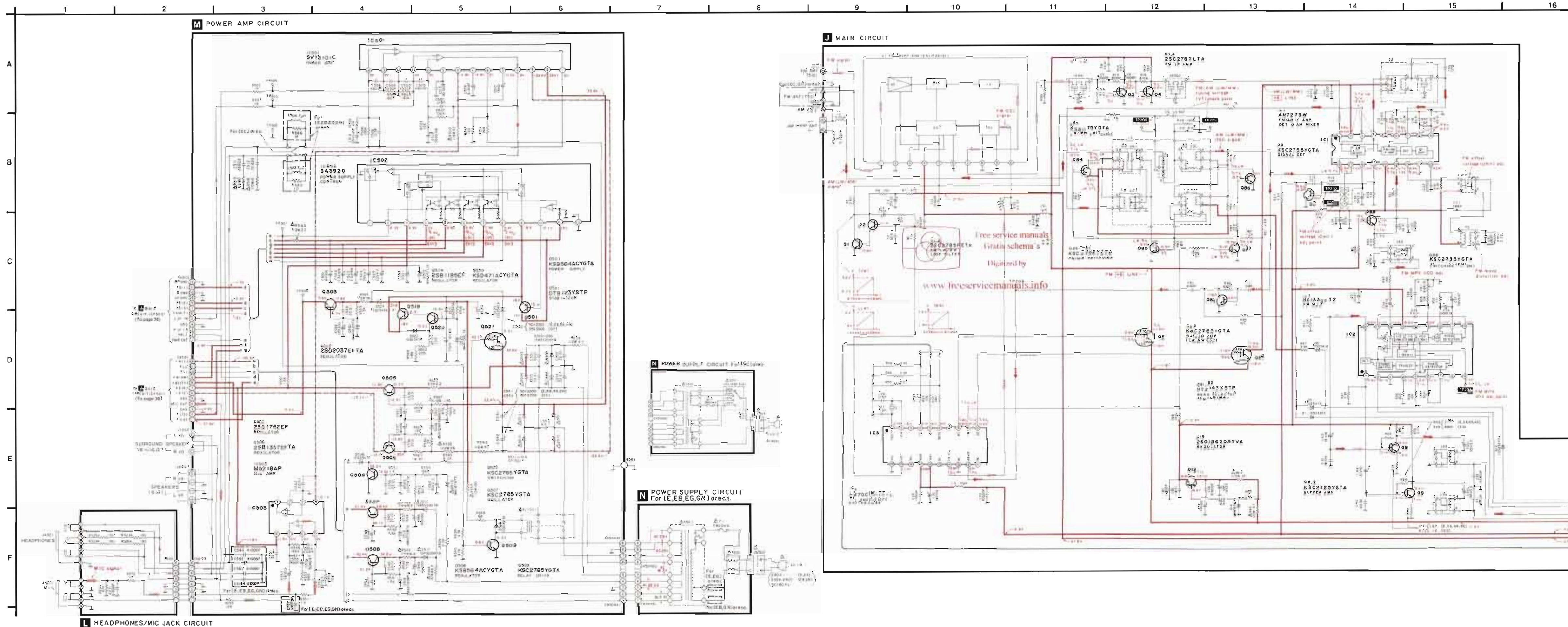
IC and LSI are sensitive to static electricity. Secondary trouble can be prevented by taking care during repair.

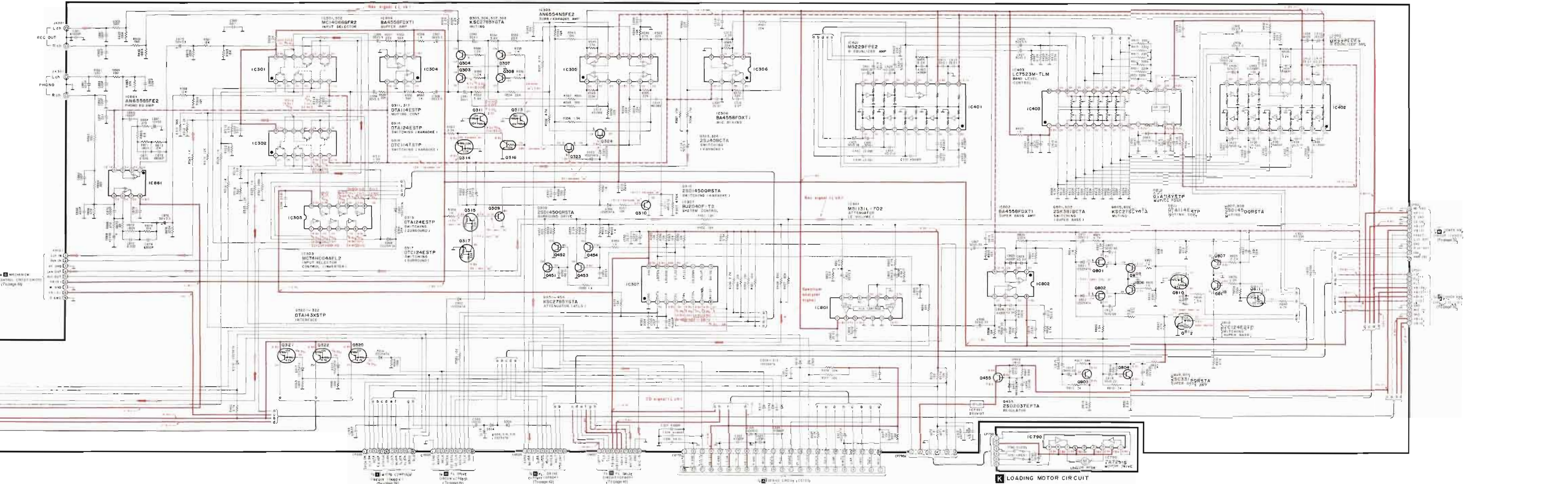
• Cover the parts boxes made of plastics with aluminum coil.

• Ground the soldering iron.

• Put a conductive mat on the work table.

• Do not touch the legs of IC or LSI with the fingers directly.





1. POWER SUPPLY (To page 31)
 2. POWER SUPPLY (To page 31)
 3. POWER SUPPLY (To page 31)
 4. POWER SUPPLY (To page 31)
 5. POWER SUPPLY (To page 31)
 6. POWER SUPPLY (To page 31)
 7. POWER SUPPLY (To page 31)
 8. POWER SUPPLY (To page 31)
 9. POWER SUPPLY (To page 31)
 10. POWER SUPPLY (To page 31)

K LOADING MOTOR CIRCUIT

1. AUDIO COMPILER (To page 31)
 2. PL DRIVE (To page 31)
 3. PL DRIVE (To page 31)
 4. PL DRIVE (To page 31)
 5. PL DRIVE (To page 31)
 6. PL DRIVE (To page 31)
 7. PL DRIVE (To page 31)
 8. PL DRIVE (To page 31)
 9. PL DRIVE (To page 31)
 10. PL DRIVE (To page 31)

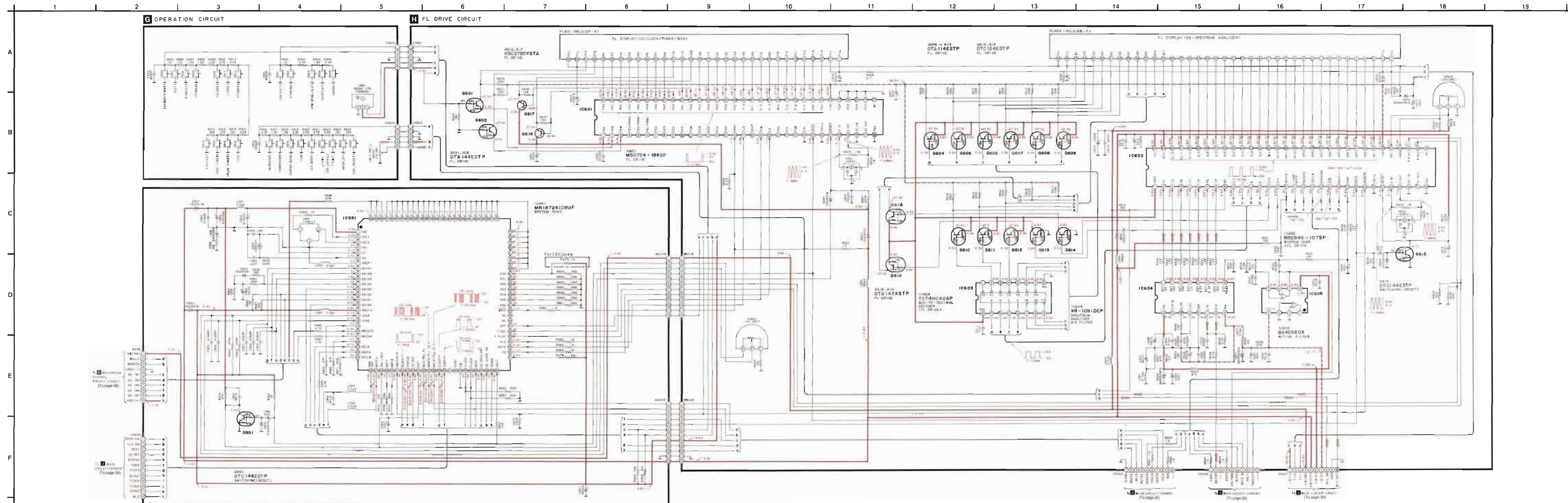
SCHEMATIC DIAGRAM (CONTROL)

SA-CH55

SA-CH55

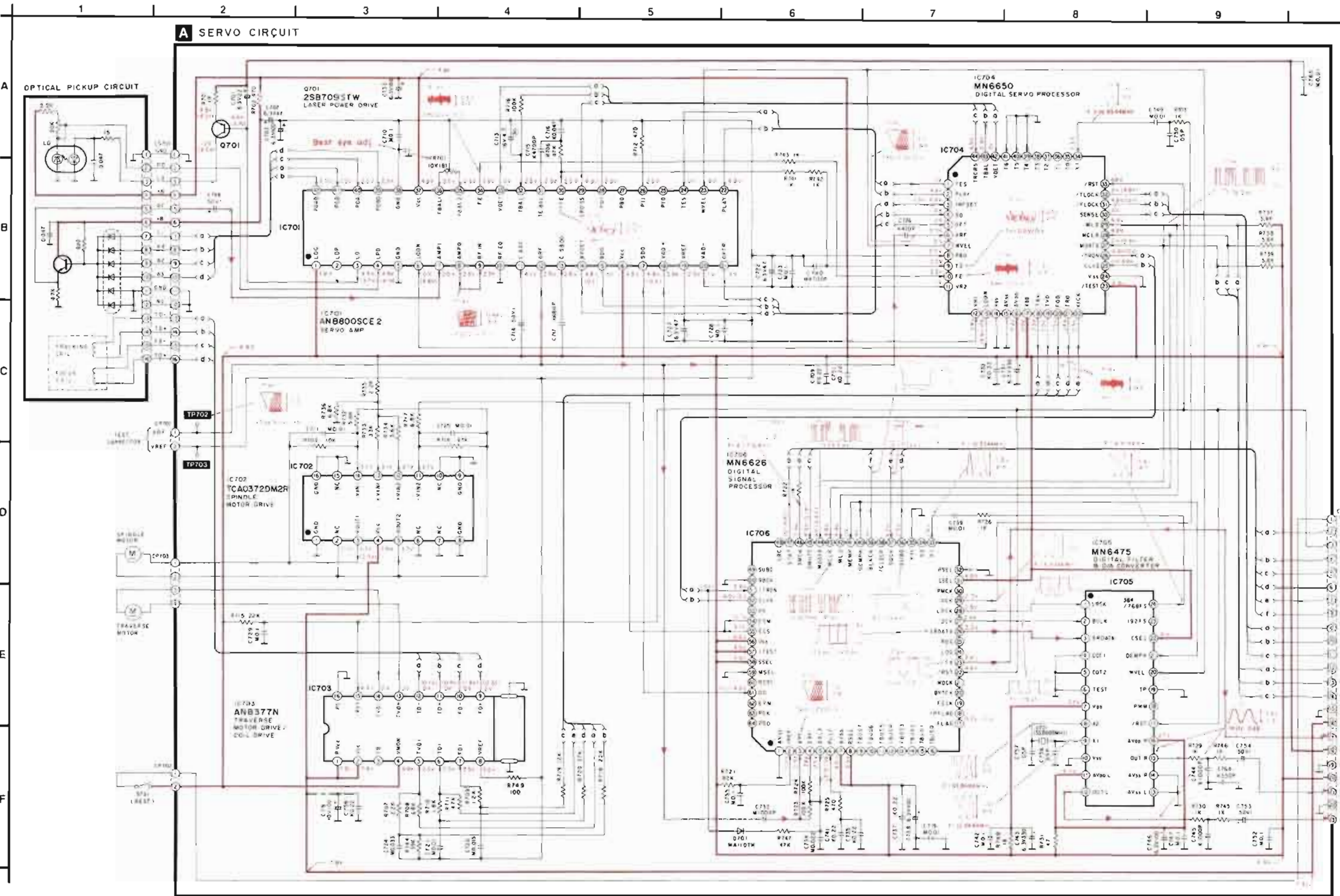
SA-CH55

SA-CH55



I MICRO COMPUTER CIRCUIT

SCHEMATIC DIAGRAM (SERVO)



- Notes:**
- S701 : RESET SWITCH
 - S790, 791 : DISC TRAY OPEN/CLOSE DETECTION SWITCH
 - S901 : CD EDIT SWITCH
 - S902 : TUNING MODE SWITCH
 - S903 : FM MODE/B.P SWITCH
 - S904 : DISPLAY (MAIN) SWITCH
 - S905 : BAND SWITCH
 - S906 : CLOCK/TIMER SWITCH
 - S907 : SET SWITCH
 - S908 : CANCEL SWITCH
 - S909 : POWER SWITCH
 - S910 : SLEEP SWITCH
 - S911~913, S916 : INPUT SWITCH (S911: TAPE, S912: TUNER, S913: DAT, S916: CD)
 - S914 : REC TIMER SWITCH
 - S915 : PLAY TIMER SWITCH
 - S917 : KARAOKE SWITCH
 - S918 : SURROUND SWITCH
 - S919 : SUPER BASS SWITCH
 - S920 : EQ. (ON/FLAT, DEMO) SWITCH
 - S921 : EQ. MODE, FIXED/USER SWITCH
 - S922, 923 : EQ. LEVEL SWITCH (S922: DOWN, S923: UP)
 - S924 : DISPLAY SWITCH
 - S925 : VOL. PRESET SWITCH

●Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

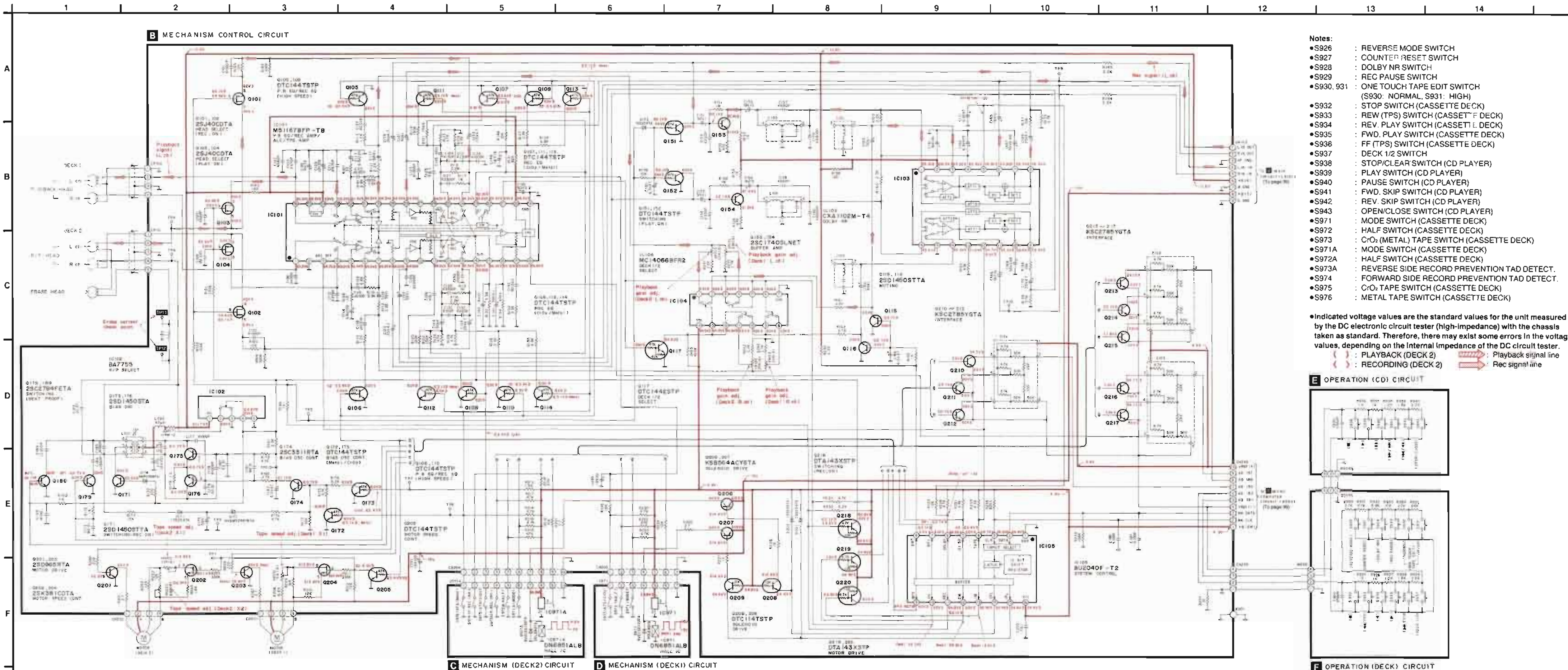
*The parenthesized are the values of voltage generated during playing (Test disc 1 kHz, L+R, 0 dB), others are voltage values in stop mode.

○ : TUNER MODE ○ : TAPE 1/2
 ○ : DAT MODE

●Important safety notice:
 Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

- Positive voltage line
- Negative voltage line
- MIC signal line
- Spectrum analyzer signal line
- CD signal

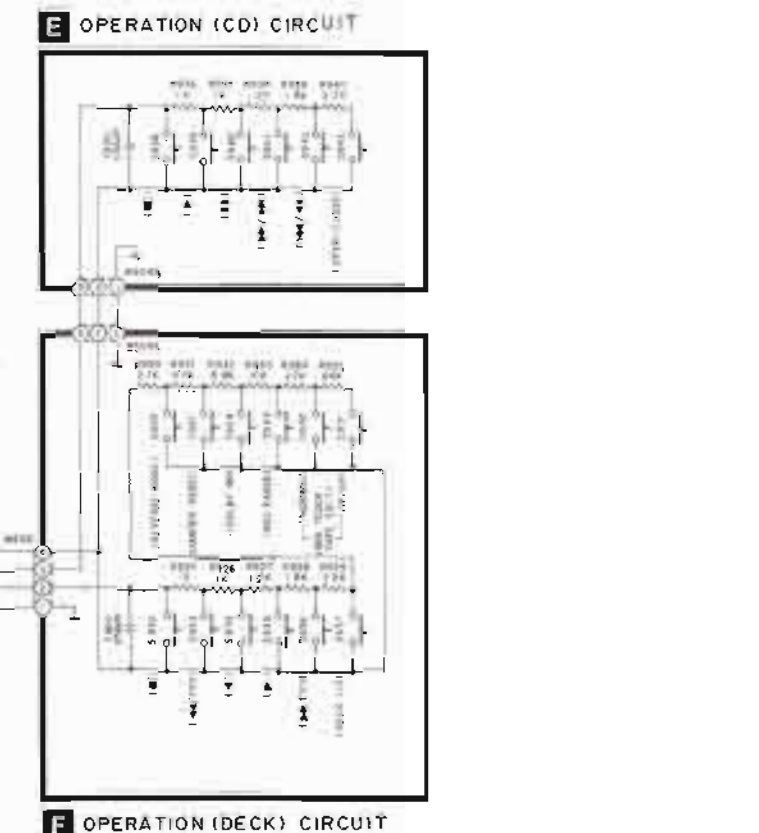
SCHEMATIC DIAGRAM (CASSETTE DECK)



- Notes:**
- S926 : REVERSE MODE SWITCH
 - S927 : COUNTER RESET SWITCH
 - S928 : DOLBY NR SWITCH
 - S929 : REC PAUSE SWITCH
 - S930, 931 : ONE TOUCH TAPE EDIT SWITCH (S930: NORMAL, S931: HIGH)
 - S932 : STOP SWITCH (CASSETTE DECK)
 - S933 : REW (TPS) SWITCH (CASSETTE DECK)
 - S934 : REV. PLAY SWITCH (CASSETTE DECK)
 - S935 : FWD. PLAY SWITCH (CASSETTE DECK)
 - S936 : FF (TPS) SWITCH (CASSETTE DECK)
 - S937 : DECK 1/2 SWITCH
 - S938 : STOP/CLEAR SWITCH (CD PLAYER)
 - S939 : PLAY SWITCH (CD PLAYER)
 - S940 : PAUSE SWITCH (CD PLAYER)
 - S941 : FWD. SKIP SWITCH (CD PLAYER)
 - S942 : REV. SKIP SWITCH (CD PLAYER)
 - S943 : OPEN/CLOSE SWITCH (CD PLAYER)
 - S971 : MODE SWITCH (CASSETTE DECK)
 - S972 : HALF SWITCH (CASSETTE DECK)
 - S973 : CrO₂ (METAL) TAPE SWITCH (CASSETTE DECK)
 - S971A : MODE SWITCH (CASSETTE DECK)
 - S972A : HALF SWITCH (CASSETTE DECK)
 - S973A : REVERSE SIDE RECORD PREVENTION TAD DETECT.
 - S974 : FORWARD SIDE RECORD PREVENTION TAD DETECT.
 - S975 : CrO₂ TAPE SWITCH (CASSETTE DECK)
 - S976 : METAL TAPE SWITCH (CASSETTE DECK)

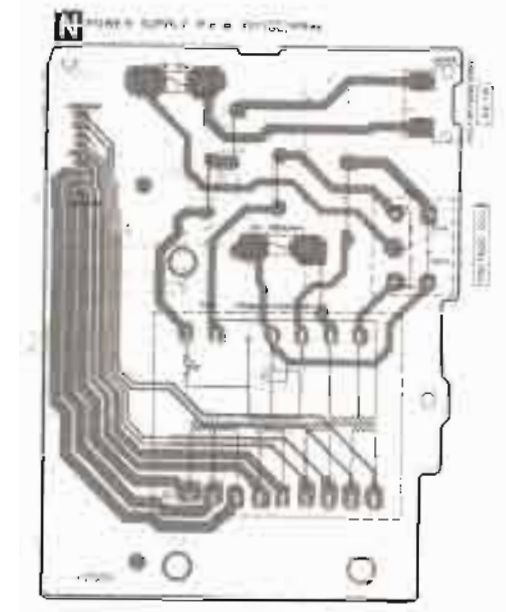
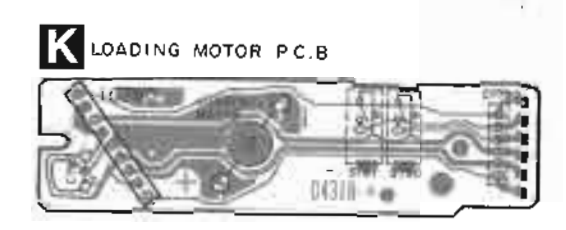
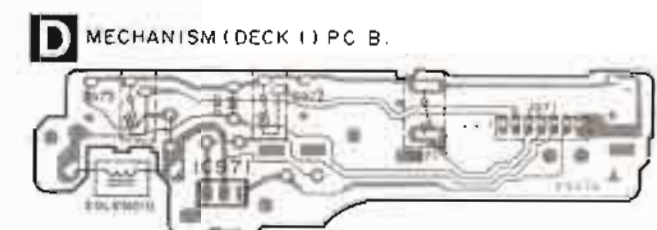
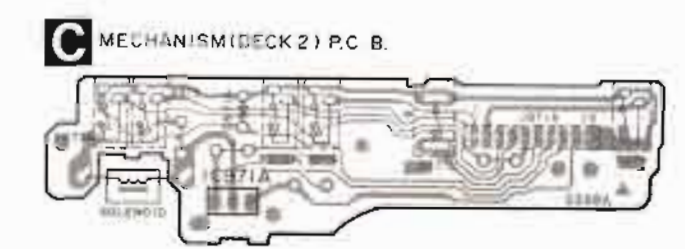
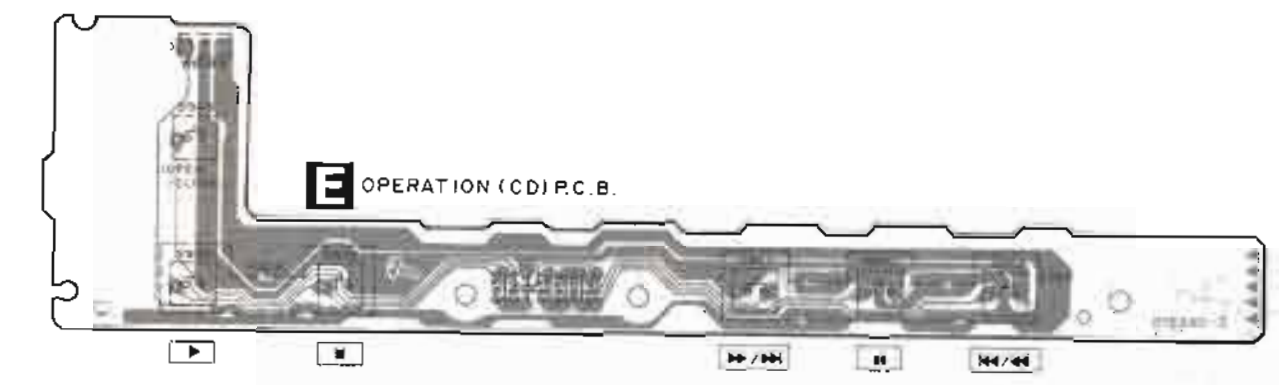
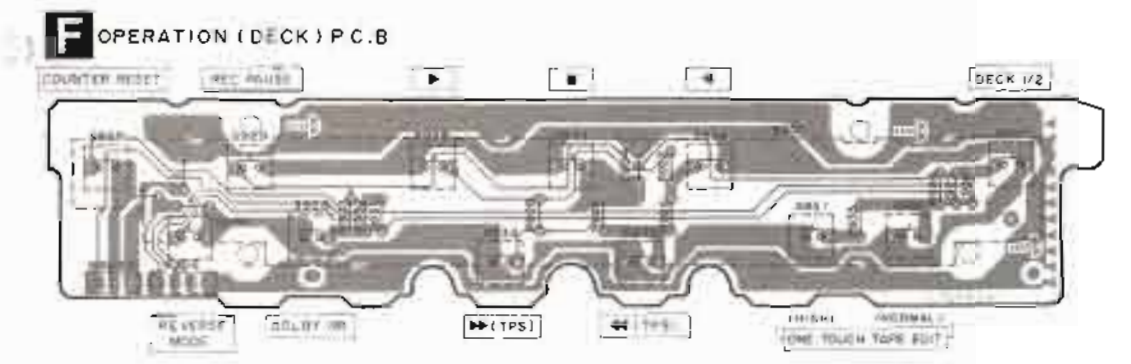
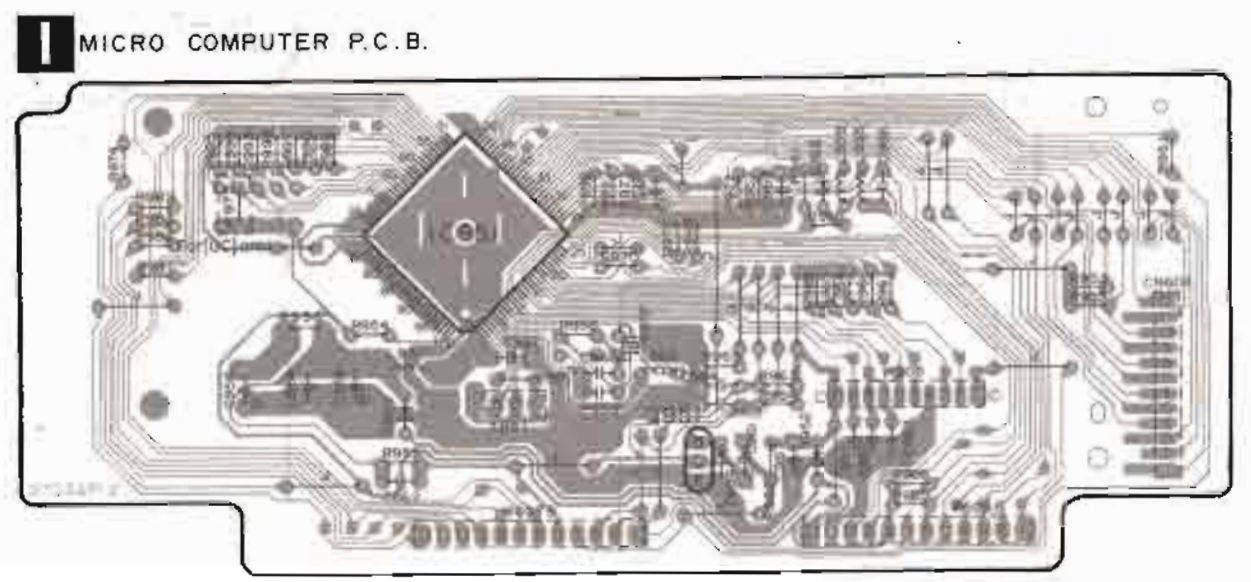
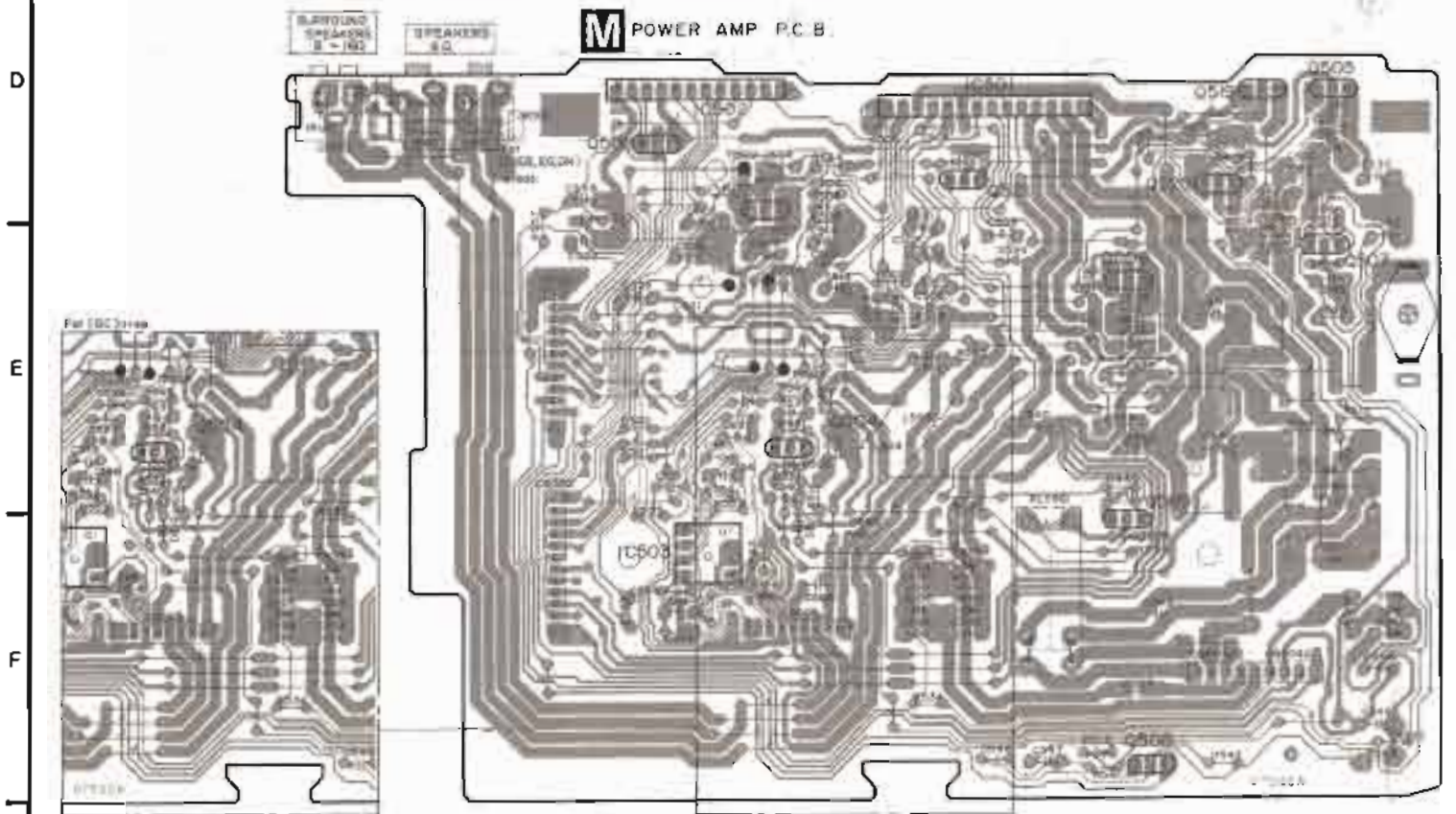
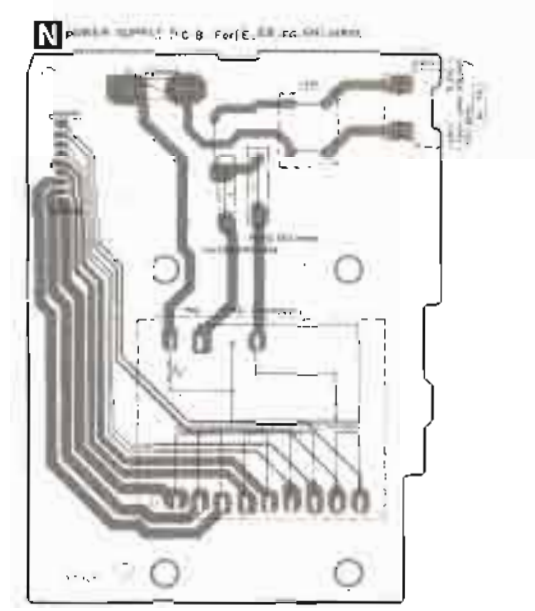
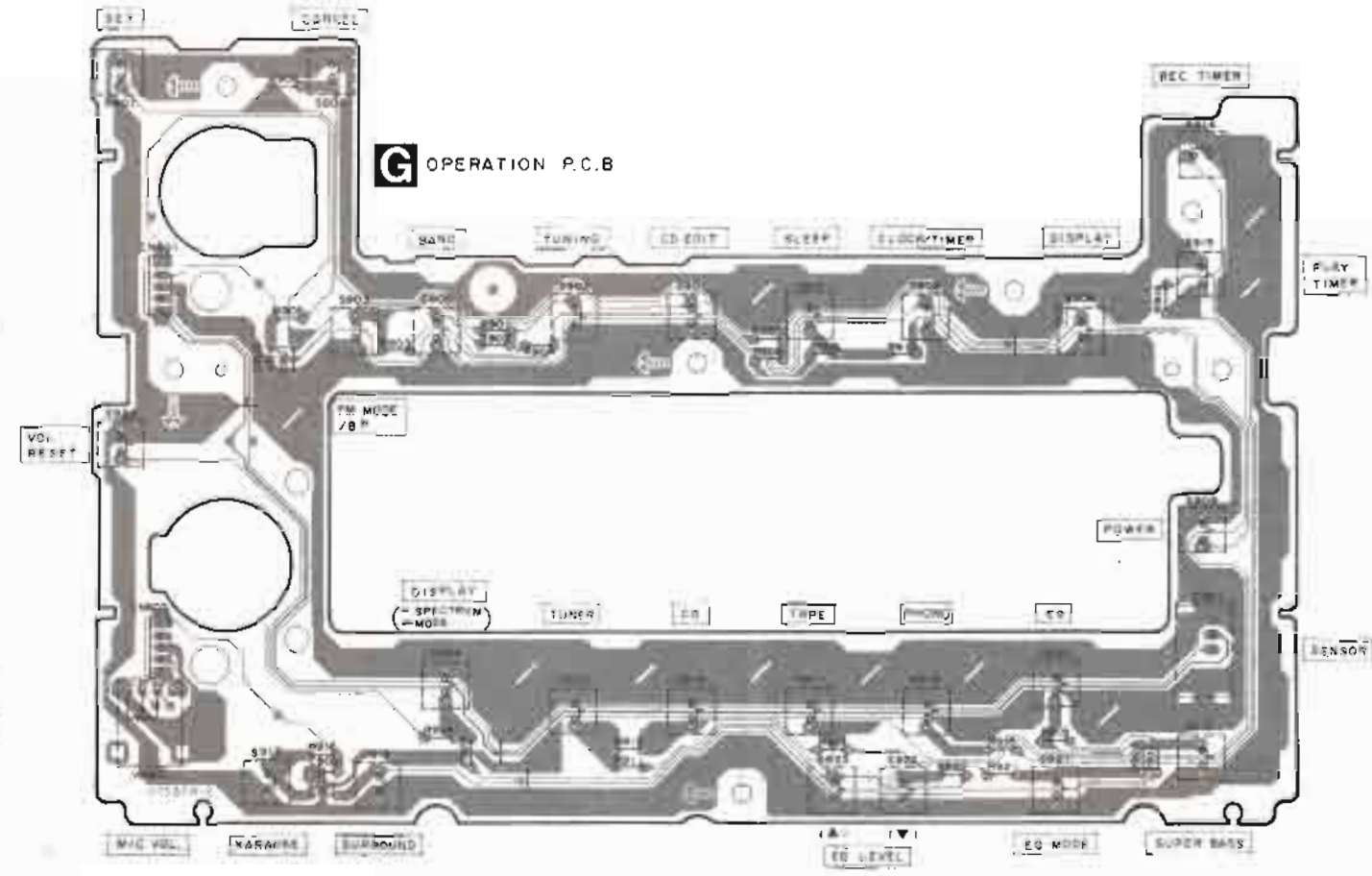
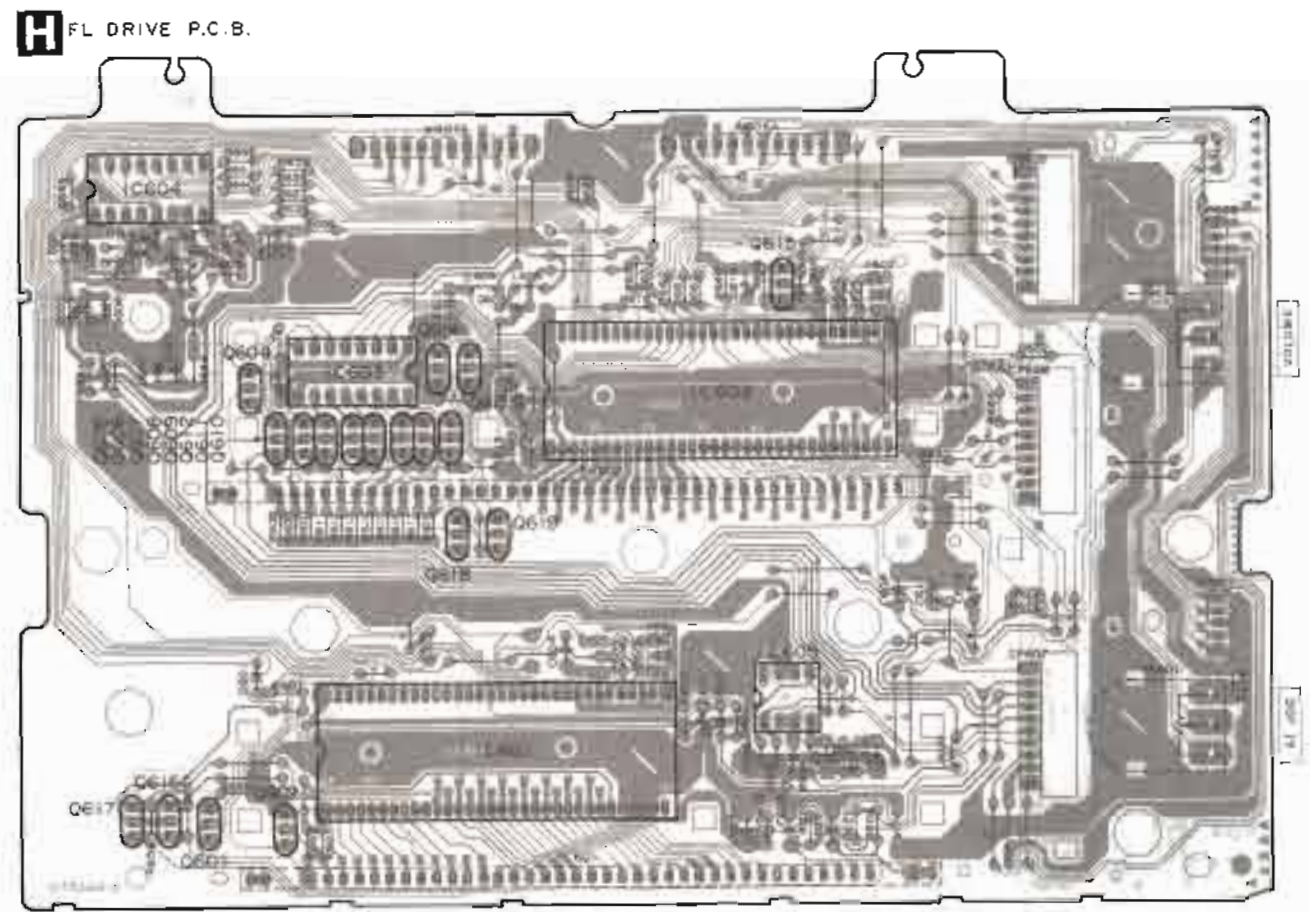
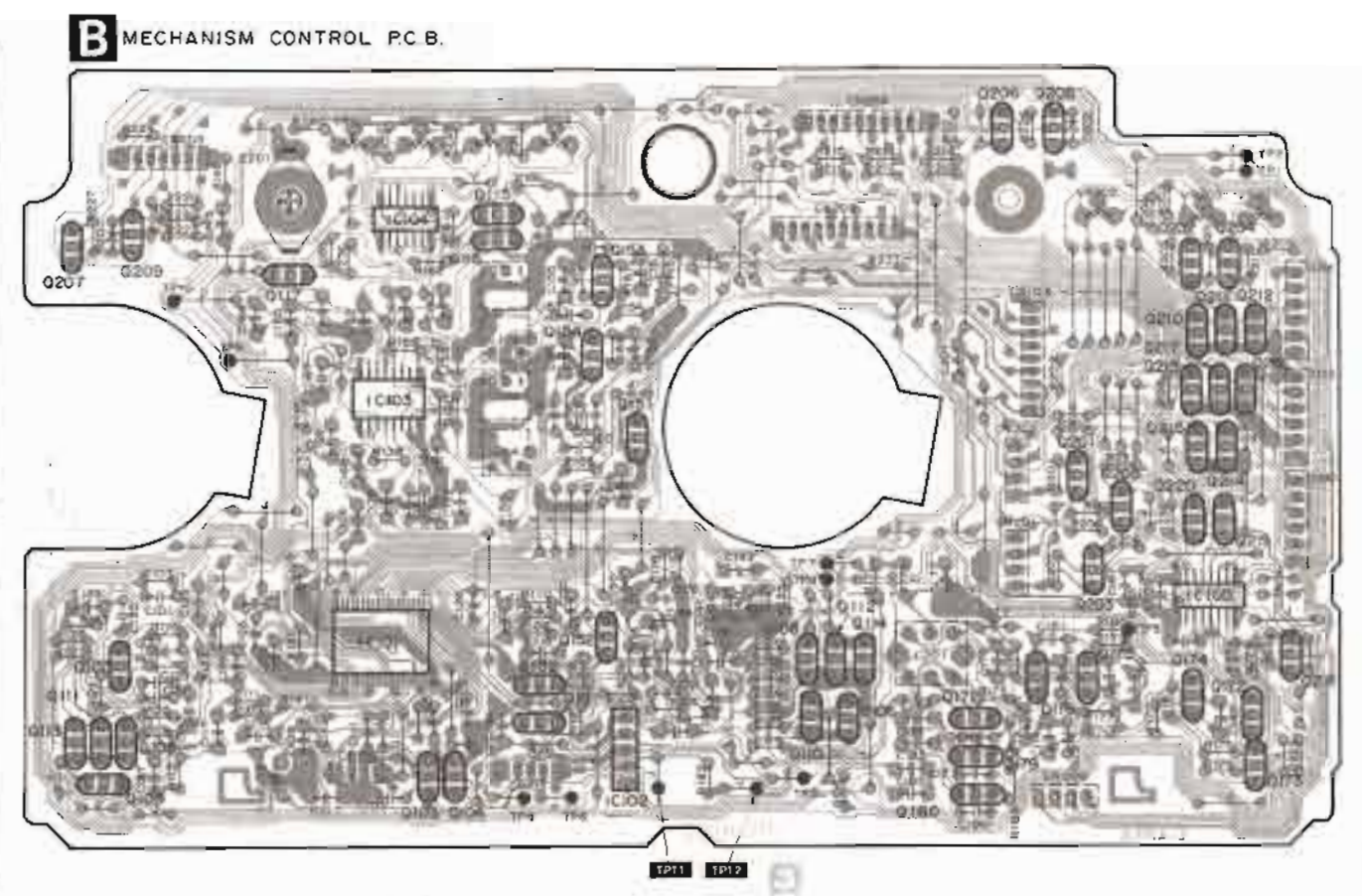
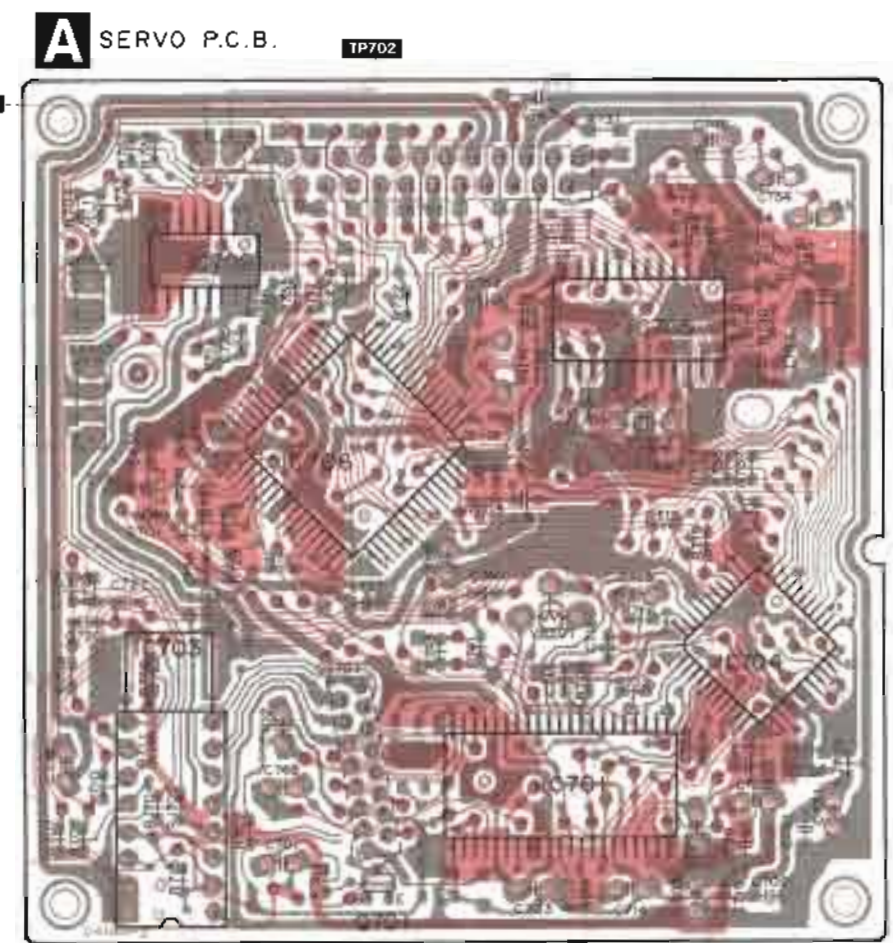
●Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

() : PLAYBACK (DECK 2) () : Playback signal line
 () : RECORDING (DECK 2) () : Rec signal line



C MECHANISM (DECK2) CIRCUIT **D MECHANISM (DECK1) CIRCUIT**

E OPERATION (CD) CIRCUIT **F OPERATION (DECK) CIRCUIT**



This printed circuit board is shown from the back side of chip parts.

Notes:

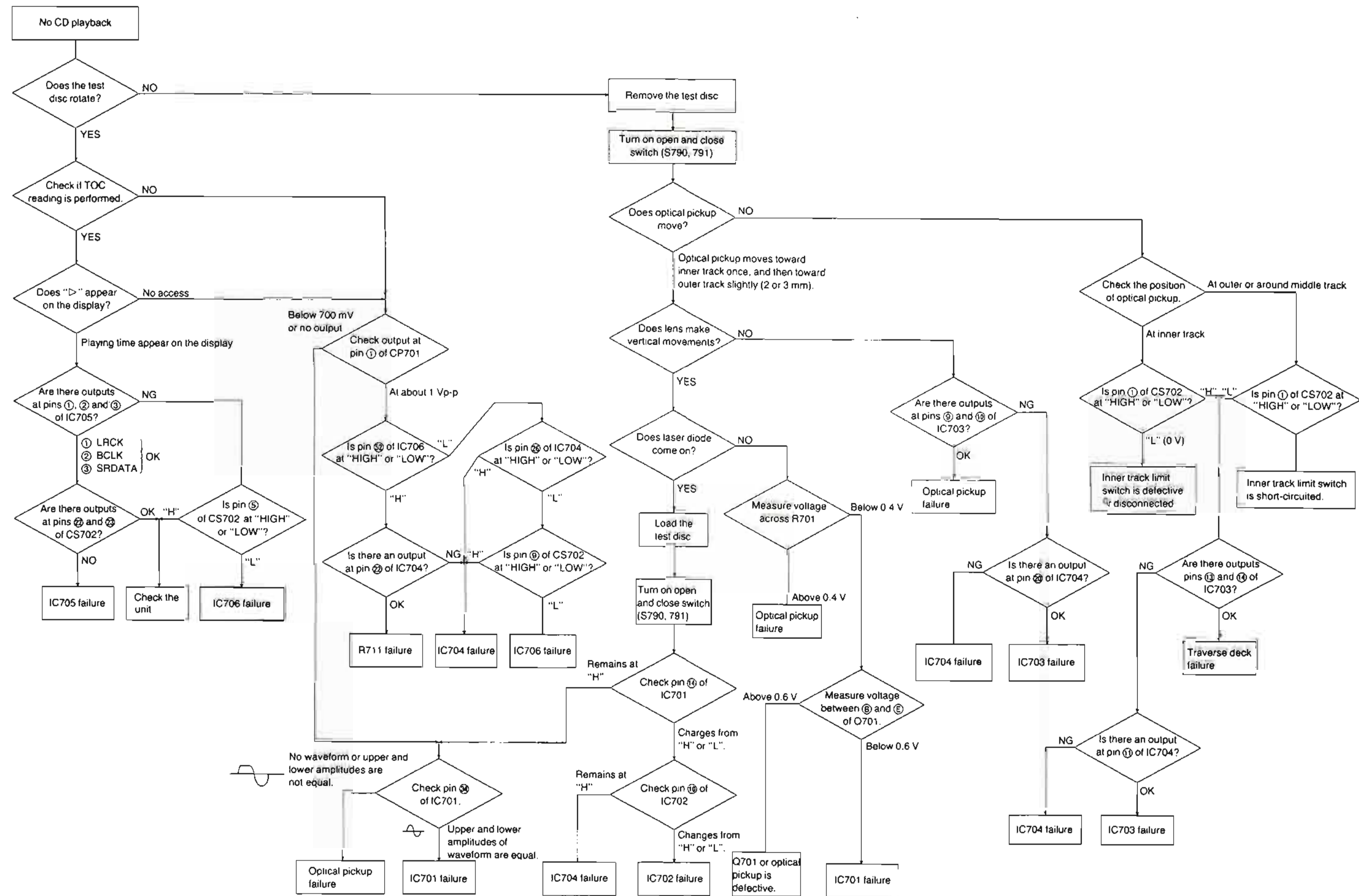
1. The circuit shown in () on the conductor indicates printed circuit on the back side of the printed circuit board.
2. The circuit shown in () on the conductor indicates printed circuit on the front side of the printed circuit board.
3. The symbols (●) shown in the circuit board indicate connection points between conductors on the front side and back side of the circuit board.

•This circuit board diagram may be modified at any time with the development of new technology.

■ TERMINAL GUIDE OF IC'S, TRANSISTOR AND DIODES

BA4558FDXT1 	MC74HC04AFL2 	<table border="1"> <tr> <td>MC14066BFR2</td> <td>14Pin</td> <td>TCA0372DM2R</td> <td>16Pin</td> <td>LC7523M-TLM</td> <td>30Pin</td> </tr> <tr> <td>AN6554NSFE2</td> <td>14Pin</td> <td>BA1332FT2</td> <td>18Pin</td> <td>M51167BFP-TB</td> <td>36Pin</td> </tr> <tr> <td>BLU2040F-T2</td> <td>16Pin</td> <td>LM7001M-TE-L</td> <td>20Pin</td> <td>AM800SCEZ</td> <td>42Pin</td> </tr> <tr> <td>CXA1102M-T4</td> <td>16Pin</td> <td>M5229FPE2</td> <td>20Pin</td> <td></td> <td></td> </tr> <tr> <td>MC74HC139AFL</td> <td>16Pin</td> <td>MN5475</td> <td>24Pin</td> <td></td> <td></td> </tr> </table>				MC14066BFR2	14Pin	TCA0372DM2R	16Pin	LC7523M-TLM	30Pin	AN6554NSFE2	14Pin	BA1332FT2	18Pin	M51167BFP-TB	36Pin	BLU2040F-T2	16Pin	LM7001M-TE-L	20Pin	AM800SCEZ	42Pin	CXA1102M-T4	16Pin	M5229FPE2	20Pin			MC74HC139AFL	16Pin	MN5475	24Pin		
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■ TROUBLESHOOTING GUIDE



●IC703 (AN8377N)

Pin No.	Mark	I/O Division	Function
1	PVCC	I	Driver power supply (+5 V)
2	VCC	I	Power supply (+5 V)
3	TB	O	External transistor base driving output
4	VMON	O	Voltage (+5 V) output
5	TVDI	I	Traverse error signal input
6	FDI	I	Focus error signal input
7	TDI	I	Tracking error signal input
8	VREF	I	Reference voltage input

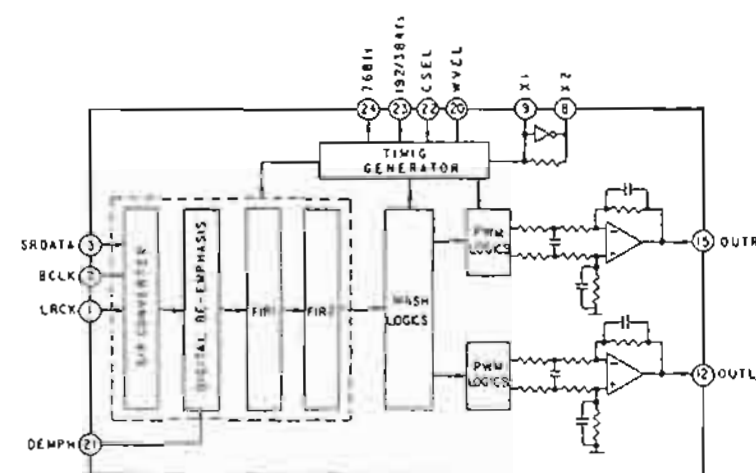
Pin No.	Mark	I/O Division	Function
9	TD-	O	Inverting output of tracking driver
10	TD+	O	Non-inverting output of tracking driver
11	FD-	O	Inverting output of focus driver
12	FD+	O	Non-inverting output of focus driver
13	TVD-	O	Inverting output of traverse driver
14	TVD+	O	Non-inverting output of traverse driver
15	RESET	O	Reset signal output
16	PC	I	PC input

●IC704 (MN6650)

Pin No.	Mark	I/O Division	Function
1	TES	O	Tracking error shunt signal (H: shunt)
2	PLAY	O	"Play" signal (H: play)
3	/RFDET	I	RF detection signal (L: detection)
4	DO	I	Dropout signal (H: dropout)
5	OFT	I	Off track signal (H: off track)
6	ARF	I	RF signal input
7	WVEL	O	High speed status signal (H: high speed)
8	PBO	I	Potension buffer signal input (Analog input)
9	TE	I	Tracking error signal input (Analog input)
10	FE	I	Focus error signal input (Analog input)
11	VR2	I	Reference voltage for A/D (Low reverse)
12	VR1	I	Reference voltage for A/D (High reverse)
13	LON	O	Laser "ON" signal (H: ON)
14	VSS	I	Power supply (Digital system OV)
15	AVSS	I	Power supply (Analog system OV)
16	AVDD	I	Power supply (Analog system +5 V)
17	VDD	I	Power supply (Digital system +5 V)
18	TRV	O	Traverse force transmission output
19	TVD	O	Traverse drive output
20	FOD	O	Focus drive output
21	TRD	O	Tracking drive output
22	KICK	O	Kick pulse output

Pin No.	Mark	I/O Division	Function
23	/TEST	I	Test terminal ("L", normal)
24	VSS	I	Power supply (Digital system OV)
25	CLVS	I	Spindle servo condition signal (H: CLV L: Rough servo)
26	/TRON	O	Tracking servo "ON" signal (L: ON)
27	MDATA	I	Micro computer command data input
28	MCLK	I	Micro computer command clock signal input
29	MLD	I	Micro computer command load signal input (L: load)
30	SENSE	O	Sense signal input
31	/FLOCK	O	Focus servo pull-in signal (L: take-in condition)
32	/TLOCK	O	Tracking servo pull-in signal (L: take-in condition)
33	/RST	I	Reset input (L: reset)
34	X1	I	Clock input (fX1 = 16.9344 MHz)
35	T0	O	Test terminal ("Open", normal)
36	T1	O	Test terminal ("Open", normal)
37	T2	O	Test terminal ("Open", normal)
38	T3	O	Test terminal ("Open", normal)
39	T4	I	Test terminal ("L", normal)
40	T5	I	Test terminal ("L", normal)
41	T6	I	Test terminal ("L", normal)
42	VDET	I	Vibration detection signal input (H: detection)
43	TBAL	O	Tracking balance adjustment output
44	TRCRS	I	Track cross signal input

●IC705 (MN6475)



Pin No.	Mark	I/O Division	Function
1	LRCK	I	L/R detection signal
2	BCLK	I	Bit clock for SRDATA
3	SRDATA	I	Serial data input
4	COT1	—	Connected to D.GND
5	COT2	—	Connected to D.GND
6	TEST	—	Connected to D.GND
7	VDD	I	Digital system power supply (+5 V)
8	x2	—	Crystal oscillator connection
9	x1	—	Crystal oscillator connection
10	VSS	—	Connected to GND
11	AVDDL	I	Power supply (+5 V)
12	OUT.L	O	Lch output
13	AVSSL	—	Connected to A.GND
14	AVSSR	—	Connected to A.GND
15	OUT.R	O	Rch output
16	AVDDR	I	Power supply (+5 V)
17	/RST	I	Reset signal input (L: reset)
18	PWM	—	NC
19	CP	—	Connected to D.GND
20	WVEL	I	High speed status signal input (H: high speed)
21	DEMPH	I	De-emphasis ON signal (H: ON)
22	CSEL	I	Test terminal
23	192FS/384FS	—	NC
24	768FS	O	Clock output

Pin No.	Mark	I/O Division	Function
1	LRCK	I	L/R clock input
2	BCLK	I	Serial input bit clock input
3	SRDATA	I	Serial input data input
4	COT1	—	Test mode input terminal 1 (normal: L)
5	COT2	—	Test mode input terminal 2 (normal: L)
6	TEST	—	Test mode input terminal 3 (normal: L)
7	DVDD	I	Digital system power supply (+5 V)
8	x2	—	Crystal oscillator connection
9	x1	—	Crystal oscillator connection
10	DVSS	—	Digital system ground terminal
11	AVDDL	I	Analog system power supply 1 (+5 V)
12	OUTL	O	Analog output (Lch)
13	AVSSL	—	Analog system ground terminal 1
14	AVSSR	—	Analog system ground terminal 2
15	OUTR	O	Analog output (Rch)
16	AVDDR	I	Analog system power supply 2 (+5 V)
17	RSTB	I	Reset terminal (L: reset)
18	PWM	O	PWM output
19	TP	—	Test terminal (normal: L)
20	WVEL	I	Motion speed switch (H: high speed)
21	DEMPH	I	Digital de-emphasis ON/OFF terminal (H: ON)
22	CSEL	I	Output clock frequency selection terminal of CK192
23	CK192	O	Clock divided frequency output
24	CK768	O	Clock output

●IC706 (MN6626)

Pin No.	Mark	I/O Division	Function
1	AVSS	I	GND for DSL, PLL circuit (OV)
2	IRFF	I	Reference electric current input
3	ARF	I	RF signal input
4	DRF	I	DSL bias
5	DSLIF	O	DSL loop filter
6	PLLF	—	PLL loop filter
7	AVDD	I	Power supply for DSL, PLL
8	RSEL	I	RF signal quality decision terminal
9	TBUS7	O	Test terminal (normal: Open)
16	TBUS0	O	Test terminal (normal: Open)
17	FLAG	O	Error/flag output
18	IPFLAG	O	Interpolation flag
19	FCLK	O	Crystal frame clock
20	BTCK	O	Byte clock
21	WDCK	O	Word clock
22	/RST	I	Reset input
23	TX	O	Digital audio interface output
24	LDG	O	Lch deglitch signal
25	RDG	O	Rch deglitch signal
26	SRDATA	O	Serial data signal
27	SCK	O	Bit clock for SRDATA
28	LRCK	O	L, R discrimination signal
29	XCK	O	Crystal oscillator clock output
30	PMCK	O	1/2e divided frequency clock signal of crystal oscillator
31	CSEL	I	Test terminal (normal: L)
32	PSEL	I	Test terminal (normal: L)
33	X1	—	Crystal oscillator circuit input
34	X2	—	Crystal oscillator circuit output
35	VSS	I	Power supply (OV)
36	SUBQ	O	Sub-code Q-code output
37	SQCK	I	External clock for sub-code Q resistor
38	/CLDCK	O	Sub-code frame clock signal
39	BLKCK	O	Sub-code block clock signal
40	DEMPH	O	De-emphasis ON signal
41	MEMP	I	Emphasis signal input (For digital audio interface)
42	MLD	I	Micro computer command load signal input (L: load)

Pin No.	Mark	I/O Division	Function
43	MCLK	I	Micro computer command clock signal input
44	MDATA	I	Micro computer command data input
45	DMUTE	I	Muting input
46	SMCK	O	MSEL = 1/2e divided frequency clock signal of crystal oscillator when "H" level MSEL = 1/4 divided frequency clock signal of crystal oscillator when "L" level
47	STAT	O	Status signal
48	CRC	O	Sub-code CRC check result (H: OK, L: NG)
49	SUBC	O	Sub-code serial output data
50	SBCK	I	Clock input for sub-code serial output
51	/TRON	I	Tracking servo ON signal
52	CLVS	O	Spindle servo phase synchronization condition signal (H: CLV L: rough servo)
53	PC	O	Spindle motor ON signal (L: ON)
54	ECM	O	Spindle motor drive signal (Force mode output)
55	ECS	O	Spindle motor drive signal (Servo error signal output)
56	VDD	I	Power supply (+5 V)
57	/TEST	I	Test terminal (normal: H)
58	SSEL	I	SUBQ terminal Output mode switch terminal (H: Q code buffer mode)
59	MSEL	I	SMCK terminal output frequency switch terminal
60	RESY	O	Resynchronization signal of frame synchronization (H: synchronization, L: not)
61	DO	I	Drop-out signal (H: drop-out)
62	EFM	O	EFM signal output
63	PCK	O	PLL extract clock output
64	PDO	—	Phase comparison signal of EFM signal and PCK signal

●IC602 (M50946-107SP)

Pin No.	Mark	I/O Division	Function
1	VREF	I	Reference voltage (Power supply +5 V)
2	f1	I	Spectrum analyzer control signal input 63 Hz
3	f2	I	Spectrum analyzer control signal input 160 Hz
4	f3	I	Spectrum analyzer control signal input 400 Hz
5	f4	I	Spectrum analyzer control signal input 1 kHz
6	f5	I	Spectrum analyzer control signal input 2.5 kHz
7	f6	I	Spectrum analyzer control signal input 6.3 kHz
8	f7	I	Spectrum analyzer control signal input 12.5 kHz
9	KEY	I	Key signal input (8 bit A/D signal)
10 ? 13	D~A	O	Segment signal output for FL
16	MUTE B	O	Muting signal output
17	-12 dB MUTE	O	-12 dB Muting control signal output for electronic volume
18	GEDATA	O	G, EQ control signal output
19	GECLK	O	G, EQ clock signal output
20	KARAOKE	O	KARAOKE control signal output

Pin No.	Mark	I/O Division	Function
21	SUR	O	Surround control signal output
22	BASS	O	Super bass control signal output
23	PWM	O	PWM control signal output for electronic volume
24	HOLD	I	Power off detection input "L level" = OFF
25	REMOTET	I	Remote control receiving signal input
26	CNV _{SS}	—	Connected to GND
27	RESET	I	Reset control signal input
28	X IN	I	Ceramic Oscillator connection (input)
29	X OUT	O	Ceramic Oscillator connection (output)
30	XC IN	I	Connected to GND
31	XC OUT	O	Not used, open
32	V _{SS}	I	Connected to GND
33	NC	—	Not used
34	T.REC	I	Tape recording control signal input
35	T.PLAY	I	Tape playback control signal input
36 ? 37	VR0, VR1	I	Level encoder volume control signal input
38	-Vp	I	Pull down voltage input
39 ? 62	SR1~SR12 SL1~SL12	O	Segment signal output for FL
63	AV _{CC}	I	Power supply +5
64	V _{CC}	I	Power supply +5

●IC601 (M50754-186SP)

Pin No.	Mark	I/O Division	Function
1	V _{CC}	I	Power supply +5
2, 3	P65, P64	O	Segment signal output for FL
4~7 8~15	P63~P60 P27~P20	—	Not used, open
16	SRDY	I/O	Serial data (8 bit) in/output
17	CLK	I/O	Serial clock control signal in/output
18	SOUT	—	Not used, open
19 20	SIN SC	I/O	8 bit data control signal in/output
21 ? 23	P32~P30	I/O	Not used, open
24	P51	I	Connected to GND
25	HOLD	I	Power off detection input "Level" = OFF
26	CNV _{SS}	I	GND

●IC951 (MN1872410RUB)

Pin No.	Mark	I/O Division	Function
1	VDD	I	Power supply +5.6 V
2, 3	OSC 1, 2	I	Reference OSC terminal (connected to crystal oscillator 4 MHz)
4	V _{SS}	I	GND
5, 6	XI, XO	I/O	Clock OSC terminal (connected to ceramic oscillator 32 kHz)
7	VREF-	I	Reference voltage input (connected to GND)
8	ADIN7	I	Deck 2 Forward Rec. Inh. switch select input Terminal
9	ADIN6	I	Deck 2 cassette half detection signal input "HI" level in half detection switch in ON mode. "LOW" level in half detection switch in OFF mode.

Pin No.	Mark	I/O Division	Function
27	RESET	I	Reset control signal input
28 29	X IN X OUT	I O	Ceramic oscillator connection (input) Ceramic Oscillator connection (output)
30 31	XC IN XC OUT	I O	Connected to GND Not used, open
32	V _{SS}	I	GND
33	NC	—	Not used
34 ? 37	P57~P54	—	Not used, open
38	-Vp	I	Pull down voltage input
39 ? 56	P51, P50 P17~P14 P47~P40 P13~P10 P07~P00	O	Segment signal output for FL

Pin No.	Mark	I/O Division	Function
10	ADIN5	I	Deck 1 cassette half detection signal input "HI" level in half detection switch in ON mode. "LOW" level in half detection switch in OFF mode.
11	ADIN4	—	Not used
12	ADIN3	I	Key control signal input (EDIT, TUNING, MODE, TITLE, DISPLAY, BAND)
13	ADIN2	I	Cassette operation control signal input
14	ADIN1	I	CD operation control signal input
15	ADIN0	I	Key control signal input (TIMER, SET, TAPE, SLEEP, CANCEL, TUNER)
16	VREF+	I	Reference voltage input (+5)
17 18	JOGA JOGB	I	JOG dial signal input
19 ? 22	—	—	—

Pin No.	Mark	I/O Division	Function
20	MKDATA	O	Cassette deck control data output
21	MKCLK	O	Cassette deck control clock signal output
23	ACLK	O	Audio control clock signal output
24	ADATA	O	Audio control data output
25	SPCLK	—	Not used
26	PWRCNT	O	Output for voltage control signal
27	MUTE A	O	Output for muting control signal
28 29 30	VOLLIMIT MBP1 MBP2	—	Not used
31	REMOC IN	I	Remote control receiving signal input
32	BLKCK	I	Sub-code block clock signal (CD)
33	STATUS	I	CD start control signal input
34	CD RST	I/O	CD Reset control signal in/output
35	RST	I	Micro computer reset control signal input
36	MLD/PLL CL	O	CD Process signal output and PLL tuner clock signal output
37	MDATA/ PLL CE	O	CD Process data signal output and PLL tuner strobe signal output
38	MCLK/ PLL DI	O	CD Process clock control signal output and PLL tuner data signal output
39	CLDCK	I	CD sub-code clock signal
40	SUBQ	I	CD sub-code data input
41	—	—	—
42	SYNC	—	—

Pin No.	Mark	I/O Division	Function
43	CM	—	Connected to GND
44	TLOCK	I	Tracking signal input and Tuner received monitor signal input
45	FLOCK	I	Focus Servo clock signal and FM ST received signal input
46	REST	I	Reset Signal input
47	CD OPEN SW	I	CD open detection switch signal input
48	CD CLOSE SW	I	CD Close detection switch signal input
49	SENSE	I	DISC sense signal input
50	HALT	I	Power down detection signal input
51	—	—	—
52	CS	I/O	8 Bit signal data in/output
53	DATA	I/O	8 Bit signal data in/output
54	CLK	I/O	Serial clock data signal in/output
55	T. PLAY	O	Playback control signal output
56	T. REC	O	Rec control signal output
57	DOT	O	Segment signal output
58 59	NC	—	—
60	SROY	I/O	8 Bit Serial data in/output
61 ? 67	P56 ? P50	I	Reference voltage (BIAS) input
68 ? 100	—	—	—

REPLACEMENT PARTS LIST

Notes :

- Important safety notice:

Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

- The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)

- Parts without these indications can be used for all areas.

- Remote Control Ass'y:

Supply period for three years from termination of production.

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)					
IC1	AN7273W	I. C. FM/AM 1F AMP. /DET.		Q1	2SC2785FE	TRANSISTOR	
IC2	BA1332FT2	I. C. FM MPX VCO.		Q2	2SC2785FE	TRANSISTOR	
IC5	LM7001M-TE-L	I. C. PLL FREQ SYNTHESIZER		Q3, 4	2SC2787L	TRANSISTOR	
IC101	M51167BFP-TB	I. C. P. B. EQ. /REC. AMP/ALC/TPS		Q5	KSC2785YGTA	TRANSISTOR	
IC102	BA7755	I. C. R/P SELECT		Q8, 9	KSC2785YGTA	TRANSISTOR	
IC103	CXA1102M-T4	I. C. DOLBY NR		Q19	2SD1862QRTV6	TRANSISTOR	
IC104	MC14066BFR2	I. C. DECK 1/2 SELECT		Q81, 82	DTA143XSTP	TRANSISTOR	
IC105	BU2040F-T2	I. C. SYSTEM CONTROL		Q83	KSC2785YGTA	TRANSISTOR	
IC301, 302	MC14066BFR2	I. C. INPUT SELECTOR		Q84	KSA1175YGTA	TRANSISTOR	
IC303	MC74HC04AFL2	I. C. INPUT SELECTOR CONTROL		Q85-88	KSC2785YGTA	TRANSISTOR	
IC304	BA4558FDXT1	I. C. BUFFER AMP.		Q101-104	2SJ40CDTA	TRANSISTOR	
IC305	AN6554NSFE2	I. C. SURROUND/KARAOKE AMP.		Q105-114	DTC144TSTP	TRANSISTOR	
IC306	BA4558FDXT1	I. C. MIC MIXING		Q115, 116	2SD1450STTA	TRANSISTOR	
IC307	BU2040F-T2	I. C. SYSTEM CONTROL		Q117	DTC144ESTP	TRANSISTOR	
IC401, 402	M5223FPE2	I. C. G. EQUALIZER AMP.		Q151, 152	DTC144TSTP	TRANSISTOR	
IC403	LC7523M-TLM	I. C. BAND LEVEL CONTROL		Q153, 154	2SC1740SLNET	TRANSISTOR	
IC501	SV13101C	I. C. POWER AMP.		Q171	2SD1450STTA	TRANSISTOR	
IC502	BA3920	I. C. POWER SUPPLY CONTROL		Q172, 173	DTC144TSTP	TRANSISTOR	
IC503	M5218AP	I. C. MIC AMP.		Q174	2SC3311R	TRANSISTOR	
IC601	M50754-186SP	I. C. FL. DRIVE		Q175, 176	2SD1450RTA	TRANSISTOR	
IC602	M50946-107SP	I. C. SYSTEM CONT. /FL. DRIVE		Q179, 180	2SC2784FETA	TRANSISTOR	
IC603	TC74HC42AP	I. C. BCD-TO-DECIMAL DECODER		Q201	2SD965Q	TRANSISTOR	
IC604	XR-1091DCP	I. C. SPECTRUM ANALYZER/B. P. F		Q202	2SK381BCDTA	TRANSISTOR	
IC605	BA4558DX	I. C. ACTIVE FILTER		Q203	2SD965Q	TRANSISTOR	
IC701	AN8800SCE2	I. C. SERVO AMP.		Q204	2SK381BCDTA	TRANSISTOR	
IC702	TCA0372DM2R	I. C. SPINDLE MOTOR DRIVE		Q205	DTC144TSTP	TRANSISTOR	
IC703	AN8377N	I. C. TRAVERSE MOTOR DRIVE		Q206, 207	KSB564ACYGTA	TRANSISTOR	
IC704	MN6650	I. C. DIGITAL SERVO PROCESSOR		Q208, 209	DTC114TSTP	TRANSISTOR	
IC705	MN6475	I. C. DIGITAL FILTER		Q210-217	KSC2785YGTA	TRANSISTOR	
IC706	MN6626	I. C. DIGITAL SIGNAL PRO.		Q218-220	DTA143XSTP	TRANSISTOR	
IC790	TA7291S	I. C. MOTOR DRIVE		Q303, 304	KSC2785YGTA	TRANSISTOR	
IC801	M51131L-702	I. C. ATTENUATOR (E. VOLUME)		Q307, 308	KSC2785YGTA	TRANSISTOR	
IC802	BA4558FDXT1	I. C. SUPER BASS AMP.		Q309, 310	2SD1450QRSTA	TRANSISTOR	
IC861	AN6558SFE2	I. C. PHONO EQ. AMP.		Q311	DTA114ESTP	TRANSISTOR	
IC951	MN1872410RUF	I. C. SYSTEM CONTROL		Q313	DTA114ESTP	TRANSISTOR	
IC971	DN6851ALB	I. C. HALL (DECK1)		Q314, 315	DTA124ESTP	TRANSISTOR	
IC971A	DN6851ALB	I. C. HALL (DECK2)		Q316	DTC114TSTP	TRANSISTOR	
		IC PROTECTOR(S)		Q317	DTC124EST	TRANSISTOR	
				Q320-322	DTA143XSTP	TRANSISTOR	
				Q323, 324	2SJ40BCTA	TRANSISTOR	
ICP401	SRUN10	IC PROTECTOR		Q451-454	KSC2785YGTA	TRANSISTOR	
		TRANSISTOR(S)		Q455	2SD2037EFTA	TRANSISTOR	
				Q501	KSB564ACYGTA	TRANSISTOR	
				Q503	2SD2037EFTA	TRANSISTOR	
				Q504	KSC2785YGTA	TRANSISTOR	

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
Q505	2SD1762EF	TRANSISTOR		D520	MA4150M	DIODE	
Q506	2SB1357EFTA	TRANSISTOR		D521, 522	1SS254TA	DIODE	
Q507	KSC2785YGTA	TRANSISTOR		D523	MA4051-L	DIODE	
Q508	KSB564ACYGTA	TRANSISTOR		D524-526	1SS254TA	DIODE	
Q509	KSC2785YGTA	TRANSISTOR		D601, 602	1SS254TA	DIODE	
Q519	2SB1185EF	TRANSISTOR		D603	1SS291TA	DIODE	
Q520	KSD471ACYGTA	TRANSISTOR		D604	1SS254TA	DIODE	
Q521	DTB123YSTP	TRANSISTOR		D605	MA4047MTA	DIODE	
Q601, 602	DTA144ESTP	TRANSISTOR		D606, 607	MA4062MTA	DIODE	
Q604-612	DTA114ESTP	TRANSISTOR		D701	MA110TW	DIODE	
Q613, 614	DTC124EST	TRANSISTOR		D821, 822	1SS254TA	DIODE	
Q615	DTC144ESTP	TRANSISTOR		D951	1SS291TA	DIODE	
Q616, 617	KSC2785YGTA	TRANSISTOR		D952-954	1SS254TA	DIODE	
Q618, 619	DTA143XSTP	TRANSISTOR		D971	RVD1SS133TA	DIODE	
Q701	2SB709S	TRANSISTOR		D971A	RVD1SS133TA	DIODE	
Q801, 802	2SK381BCDTA	TRANSISTOR					
Q803, 804	2SC3312R	TRANSISTOR				VARIABLE RESISTOR(S)	
Q805, 806	KSC2785YGTA	TRANSISTOR					
Q807, 808	2SD1450QRSTA	TRANSISTOR		VR1	EVNDCAA03BS3	V. R. FM MPX VCO ADJ.	
Q810	DTA114YSTP	TRANSISTOR		VR101	EVNDCAA03B24	V. R. P. B. GAIN ADJ. (DECK1:L)	
Q811	DTA114ESTP	TRANSISTOR		VR102	EVNDCAA03B24	V. R. P. B. GAIN ADJ. (DECK1:R)	
Q812	DTC124EST	TRANSISTOR		VR103	EVNDCAA03B24	V. R. P. B. GAIN ADJ. (DECK2:L)	
Q951	DTC144ESTP	TRANSISTOR		VR104	EVNDCAA03B24	V. R. P. B. GAIN ADJ. (DECK2:R)	
		DIODE(S)		VR201	EVNDCAA03B53	V. R. TAPE SPEED ADJ. (DECK1)	
				VR202	EVNDCAA03B14	V. R. TAPE SPEED ADJ. (DECK2)	
				VR203	EVNDCAA03BS3	V. R. TAPE SPEED ADJ. (DECK2)	
D1	1SS254TA	DIODE		VR601	EVQWPA02224B	V. R. AI JOG	
D2	1SS254TA	DIODE		VR602	EVQWQAF2524B	V. R. MAIN VOLUME	
D3	1SS254TA	DIODE		VR701	EVNDXAA00B14	V. R. BEST EYE	
D12	1SS254TA	DIODE		VR901	EVJ02BF01B13	V. R. MIC VOLUME	
D14	MA4062MTA	DIODE					
D171	1SS254TA	DIODE				COMPONENT COMBINATION(S)	
D172	RVDMT24R7BTA	DIODE					
D173	1SS254TA	DIODE		Z1	ENV17281G1	FM FRONT END	
D174	MA4030MTA	DIODE		Z2	RL122003M-T	COMPONENT COMBINATION	
D201, 202	1SS254TA	DIODE		Z101-103	EXBF6L306SYV	COMPONENT COMBINATION	
D301-319	1SS254TA	DIODE		Z901	RCDHC-278	REMOTE SENCER	
D401	MA4056MTA	DIODE					
D402	MA4043M	DIODE				COIL(S)	
D403	1SS254TA	DIODE					
D451	MA4082MTA	DIODE		L1	ELESNR22MA	COIL	
D502	MA4062MTA	DIODE		L2	RLA6Z002M-T	COIL	
D503-506	1SR35200TB	DIODE	△	L3	RLQZP100KT-Y	COIL	
D507, 508	MA4120	DIODE		L4	RLQZPR68KT-Y	COIL	
D509	1SS254TA	DIODE		L5	ELESNR22MA	COIL	
D510	MA167	DIODE	△	L91	ELEXT1R0KA9	COIL	
D511-514	GP15GLF	DIODE	△	L92	SLM1B10M-1M	COIL	
D515	1SR35200TB	DIODE	△	L93, 94	RLM2B003M-K	COIL	
D516	MA4270	DIODE		L101, 102	RLM9B002-1M	COIL	
D517	1SR35200TB	DIODE	△	L103, 104	RLM2B005-1M	COIL	
D518	MA4300M	DIODE		L201	RL08C002M-T	COIL	
D519	1SS254TA	DIODE		L202	RLQZB470KT-D	COIL	

Ref.No.	Part No.	Part Name & Description	Remarks	Ref.No.	Part No.	Part Name & Description	Remarks
L501	RLQZ600M-W	COIL	(E/EB/EG/GN) Δ	S915	EVQ21405R	SW, PLAY TIMER	
L503, 504	SLQY07G-40	COIL	(E/EB/EG/GN)	S916	EVQ21405R	SW, CD	
L601-604	RLQZP4R7KT-Y	COIL		S917	EVQ21405R	SW, KARAOKE	
L605, 606	RLQZP101KT-Y	COIL		S918	EVQ21405R	SW, SURROUND	
L951	RLQZP3R3KT-Y	COIL		S919	EVQ21405R	SW, SUPER BASS	
L953-956	RLQZP2R2KT-Y	COIL		S920	EVQ21405R	SW, EQ. ON/FLAT. DEMO	
		TRANSFORMER (S)		S921	EVQ21405R	SW, EQ. MODE, FIXED/USER	
				S922	EVQ21405R	SW, EQ. LEVEL (DOWN)	
T1	RL14B012-Z	TRANSFORMER		S923	EVQ21405R	SW, EQ. LEVEL (UP)	
T2	RL14B013-Z	TRANSFORMER		S924	EVQ21405R	SW, DISPLAY SPECTRAM/MODE	
T501	RTP1M5B007	POWER TRANSFORMER	Δ (E/EB/EG/GN)	S925	EVQ21405R	SW, VOL. PRESET	
T501	RTP1M5C005	POWER TRANSFORMER	Δ (GC)	S926	EVQ21405R	SW, REVERSE MODE	
		FILTER(S)		S927	EVQ21405R	SW, COUNTER RESET	
				S928	EVQ21405R	SW, DOLBY NR	
CF201	RLFFETNGA01L	CERAMIC FILTER		S929	EVQ21405R	SW, REC PAUSE	
CF202	RLFFETNGA02L	CERAMIC FILTER		S930	EVQ21405R	SW, ONE TOUCH TAPE EDIT(N)	
		OSCILLATOR(S)		S931	EVQ21405R	SW, ONE TOUCH TAPE EDIT(H)	
				S932	EVQ21405R	SW, STOP (DECK)	
X1	SVQ19U722-S	OSCILLATOR		S933	EVQ21405R	SW, TPS(REW) (DECK)	
X601, 602	EF0GC6004T4	CERAMIC OSCILLATOR		S934	EVQ21405R	SW, PLAY (REV) (DECK)	
X701	RSX233M8M01T	OSCILLATOR		S935	EVQ21405R	SW, PLAY (FWD) (DECK)	
X951	EF0GC4004A4	CERAMIC OSCILLATOR		S936	EVQ21405R	SW, TPS (FF) (DECK)	
X952	RSXD32K7F02	OSCILLATOR		S937	EVQ21405R	SW, DECK 1/2 (DECK)	
		DISPLAY (S)		S938	EVQ21405R	SW, STOP (CD)	
				S939	EVQ21405R	SW, PLAY (CD)	
FL601	RSL0107-F	DISPLAY (MAIN)		S940	EVQ21405R	SW, PAUSE (CD)	
FL602	RSL0106-F	DISPLAY (SPECTRUM ANALYZER)		S941	EVQ21405R	SW, SKIP (FWD) (CD)	
		SWITCH(ES)		S942	EVQ21405R	SW, SKIP (REV) (CD)	
				S943	EVQ21405R	SW, OPEN/CLOSE (CD)	
S501	SSR187-1	SW, VOLTAGE SELECTOR	Δ (GC)	S971	RSH1A89Z	SW, MODE (DECK1)	
S701	SSH5-E	SW, REST		S971A	RSH1A89Z	SW, MODE (DECK2)	
S790	RSH1A005	SW, LOADING CLOSE DETECT		S972	RSH1A90YB-U	SW, HALF (DECK1)	
S791	RSH1A005	SW, LOADING OPEN DETECT		S972a	RSH1A90YB-U	SW, HALF (DECK2)	
S901	EVQ21405R	SW, CD EDIT		S973	RSH1A90YB-U	SW, ATS/C+02 (DECK1)	
S902	EVQ21405R	SW, TUNING		S973A	RSH1A90YB-U	SW, R. REC. 1NH (DECK2)	
S903	EVQ21405R	SW, FM MODE/B. P		S974	RSH1A90YB-U	SW, F. REC. 1NH (DECK2)	
S904	EVQ21405R	SW, DISPLAY		S975	RSH1A90YB-U	SW, ATS/C+02 (DECK2)	
S905	EVQ21405R	SW, BAND/MW ALLOCATION		S976	RSH1A90YB-U	SW, ATS/METAL (DECK2)	
S906	EVQ21405R	SW, CLOCK/TIMER				CONNECTOR (S)	
S907	EVQ21405R	SW, SET		CN101	RJS9T4ZA	SOCKET (9P)	
S908	EVQ21405R	SW, CANCEL		CN103	RJS9T4ZA	SOCKET (9P)	
S909	EVQ21405R	SW, POWER STANDBY/ON		CN201, 202	RJS1A1704	SOCKET (4P)	
S910	EVQ21405R	SW, SLEEP		CN203	RJS7T4ZA	SOCKET (7P)	
S911	EVQ21405R	SW, TAPE		CN204, 205	SJSD1005	SOCKET (10P)	
S912	EVQ21405R	SW, TUNER		CN206	RJS1A1704	SOCKET (4P)	
S913	EVQ21405R	SW, PHONO		CN501, 502	RJU005W012	SOCKET (12P)	
S914	EVQ21405R	SW, REC. TIMER		CN505	RJS8T4ZA	SOCKET (8P)	
				CN601	SJS50581BB	SOCKET (5P)	
				CN603	SJS50581BB	SOCKET (5P)	
				CN604	RJU005W012	SOCKET (12P)	

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
CN605-607	RJU003K010M1	SOCKET (10P)		JK503	SJS9236	AC INLET	△ (E/EB/EG/GC)
CN702	RJS1A6823	SOCKET (23P)		JK503	SJSD16	AC INLET	△ (GN)
CN504A1	RJS1A1705	SOCKET (5P)		JK521	RJJD7S2YA-C	HEADPHONES JACK	
CN504A2	RJS1A1704	SOCKET (4P)					
CN504B1	RJS1A1705	SOCKET (5P)					
CN504B2	RJS1A1704	SOCKET (4P)					
CP101	RJP5G182A	CONNECTOR (5P)					
CP102	SJTD413	CONNECTOR (4P)					
CP501, 502	RJT005W012-M	CONNECTOR (12P)					
CP601	SJT30549BB1	CONNECTOR (5P)					
CP603	SJT30549BB1	CONNECTOR (5P)					
CP604	RJT005W012-M	CONNECTOR (12P)					
CP605-607	RJT003K010M1	CONNECTOR (10P)					
CP701, 702	RJP2G172A	CONNECTOR (2P)					
CP703	RJP4G172A	CONNECTOR (4P)					
CP790A	EMCS0660MT6	CONNECTOR (6P)					
CP790	RJP6G172A	CONNECTOR (6P)					
CS701	RJU035T016-1	SOCKET (16P)					
CS702	RJS1A6723-1Q	SOCKET (23P)					
J971	RJS7T72A	SOCKET (7P)					
J971A	RJS10T72A	SOCKET (10P)					
		EARTH TERMINAL (S)					
E201	SNE1004-1	GND PLATE					
E501	SNE1004-1	GND PLATE					
E901	RSC0231	SHIELD PLATE					
E902	RSC0229	SHIELD PLATE					
E903	RSC0230	SHIELD PLATE					
		FUSE HOLDER (S)					
FC1, 2	EYF52BC	FUSE HOLDER					
FC3, 4	EYF52BC	FUSE HOLDER	(GC)				
		RELAY (S)					
RLY501	RSY0007M-C	RELAY	△				
		FUSE (S)					
F1	XBA2C08TB0	FUSE, 250V T800mA	△				
F2	XBA2C20TB0	FUSE, 250V T2A	△ (GC)				
		JACK (S)					
JK101	RJH4202M	ANTENNA TERMINAL	(E/EB/EG)				
JK101	RJH4405-J	ANTENNA TERMINAL	(GC/GN)				
JK271	RJJ1D252A-C	MIC JACK					
JK301	SJF3069-5N	PHONO/REC. OUT JACK					
JK501	RJR0054M	SPEAKER TERMINAL					
JK502	SJF3068-6N	SURROUND TERMINAL					

Notes : * Capacity value are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
 * Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
		RESISTORS	R91	ERDS2TJ104	1/4W 100K	R183-185	ERDS2TJ104	1/4W 100K
			R92	ERDS2TJ152	1/4W 1.5K	R186	ERDS2TJ102	1/4W 1K
			R93	ERDS2TJ183T	1/4W 18K	R200	ERDS2TJ221	1/4W 220
R3	ERDS2TJ562	1/4W 5.6K	R94	ERDS2TJ222	1/4W 2.2K	R201	ERDS2TJ2R7T	1/4W 2.7
R4	ERDS2TJ103	1/4W 10K	R95	ERDS2TJ103	1/4W 10K	R202, 203	ERDS2TJ123	1/4W 12K
R5	ERDS2TJ6R8	1/4W 6.8	R101	ERDS2TJ334	1/4W 330K	R204	ERDS2TJ182	1/4W 1.8K
R6	ERDS2TJ561	1/4W 560	R102	ERDS2TJ104	1/4W 100K	R205	ERDS2TJ334	1/4W 330K
R7	ERDS2TJ471	1/4W 470	R103, 104	ERDS2TJ123	1/4W 12K	R206	ERDS2TJ221	1/4W 220
R8	ERDS2TJ102	1/4W 1K	R105	ERDS2TJ181T	1/4W 180	R207	ERDS2TJ2R7T	1/4W 2.7
R11	ERDS2TJ332	1/4W 3.3K	R106	ERDS2TJ102	1/4W 1K	R208	ERDS2TJ682T	1/4W 6.8K
R12	ERDS2TJ471	1/4W 470	R107, 108	ERDS2TJ330	1/4W 33	R209	ERDS2TJ183T	1/4W 18K
R13	ERDS2TJ824	1/4W 820K	R109, 110	ERDS2TJ392T	1/4W 3.9K	R210	ERDS2TJ123	1/4W 12K
R14, 15	ERDS2TJ331	1/4W 330	R111, 112	ERDS2TJ222	1/4W 2.2K	R211	ERDS2TJ334	1/4W 330K
R16	ERDS2TJ474	1/4W 470K	R113, 114	ERDS2TJ122	1/4W 1.2K	R212	ERDS2TJ123	1/4W 12K
R18, 19	ERDS2TJ102	1/4W 1K	R115, 116	ERDS2TJ225	1/4W 2.2M	R213	ERDS2TJ152	1/4W 1.5K
R20	ERDS2TJ104	1/4W 100K	R117, 118	ERDS2TJ105T	1/4W 1M	R214, 215	ERDS2TJ472	1/4W 4.7K
R21	ERDS2TJ122	1/4W 1.2K	R119, 120	ERDS2TJ104	1/4W 100K	R216-218	ERDS2TJ473	1/4W 47K
R23	ERDS2TJ103	1/4W 10K	R121, 122	ERDS2TJ154	1/4W 150K	R219	ERDS2TJ103	1/4W 10K
R27, 28	ERDS2TJ332	1/4W 3.3K	R123, 124	ERDS2TJ473	1/4W 47K	R220	ERDS2TJ472	1/4W 4.7K
R29	ERDS2TJ560T	1/4W 56	R125, 126	ERDS2TJ472	1/4W 4.7K	R221	ERDS2TJ2R7T	1/4W 2.7
R30	ERDS2TJ561	1/4W 560	R127, 128	ERDS2TJ332	1/4W 3.3K	R222	ERDS2TJ473	1/4W 47K
R31	ERDS2TJ822	1/4W 8.2K	R129, 130	ERDS2TJ682T	1/4W 6.8K	R223	ERDS2TJ472	1/4W 4.7K
R36	ERDS2TJ103	1/4W 10K	R131	ERDS2TJ823T	1/4W 82K	R224	ERDS2TJ103	1/4W 10K
R37	ERDS2TJ102	1/4W 1K	R132	ERDS2TJ335T	1/4W 3.3M	R225	ERDS2TJ2R7T	1/4W 2.7
R38	ERDS2TJ821	1/4W 820	R133	ERDS2TJ332	1/4W 3.3K	R226, 227	ERDS2TJ102	1/4W 1K
R39	ERDS2TJ103	1/4W 10K	R134	ERDS2TJ474	1/4W 470K	R228	ERDS2TJ472	1/4W 4.7K
R41, 42	ERDS2TJ562	1/4W 5.6K	R135, 136	ERDS2TJ272T	1/4W 2.7K	R229	ERDS2TJ103	1/4W 10K
R45, 46	ERDS2TJ274	1/4W 270K E/EG/GC/GN	R137-139	ERDS2TJ103	1/4W 10K	R230, 231	ERDS2TJ472	1/4W 4.7K
R45, 46	ERDS2TJ684T	1/4W 680K (EG)	R141, 142	ERDS2TJ682T	1/4W 6.8K	R232, 233	ERDS2TJ222	1/4W 2.2K
R47	ERDS2TJ332	1/4W 3.3K	R143, 144	ERDS2TJ222	1/4W 2.2K	R234	ERDS2TJ472	1/4W 4.7K
R48-50	ERDS2TJ222	1/4W 2.2K	R145, 146	ERDS2TJ103	1/4W 10K	R235, 236	ERDS2TJ104	1/4W 100K
R51	ERDS2TJ102	1/4W 1K	R151, 152	ERDS2TJ105T	1/4W 1M	R237	ERDS2TJ100	1/4W 10
R52-54	ERDS2TJ103	1/4W 10K	R153, 154	ERDS2TJ102	1/4W 1K	R239-242	ERDS2TJ272T	1/4W 2.7K
R56	ERDS2TJ103	1/4W 10K	R155, 156	ERDS2TJ471	1/4W 470	R271	ERDS2TJ473	1/4W 47K
R62	ERDS2TJ101	1/4W 100	R158	ERDS2TJ101	1/4W 100	R272	ERDS2TJ102	1/4W 1K
R63	ERDS2TJ102	1/4W 1K	R159, 160	ERDS2TJ222	1/4W 2.2K	R301, 302	ERDS2TJ123	1/4W 12K
R64 Δ	ERDS1FJ330	1/2W 33	R161, 162	ERDS2TJ472	1/4W 4.7K	R303, 304	ERDS2TJ183T	1/4W 18K
R66 Δ	ERDS1FVJ4R7T	1/2W 4.7	R163	ERDS2TJ433	1/4W 43K	R305, 306	ERDS2TJ561	1/4W 560
R69, 70	ERDS2TJ272T	1/4W 2.7K	R169, 170	ERDS2TJ102	1/4W 1K	R307	ERDS2TJ474	1/4W 470K
R71, 72	ERDS2TJ182	1/4W 1.8K E/EB/GC/GN	R171 Δ	ERD2FCVG120T	1/4W 12	R309-311	ERDS2TJ122	1/4W 1.2K
R71, 72	ERDS2TJ102T	1/4W 1K (EG)	R172	ERDS2TJ331	1/4W 330	R312	ERDS2EJ121	1/4W 120
R81	ERDS2TJ103	1/4W 10K	R173	ERDS2TJ103	1/4W 10K	R313, 314	ERDS2TJ122	1/4W 1.2K
R83	ERDS2TJ182	1/4W 1.8K	R174, 175	ERDS2TJ472	1/4W 4.7K	R315, 316	ERDS2TJ102	1/4W 1K
R84	ERDS2TJ223	1/4W 22K	R176	ERDS2TJ822	1/4W 8.2K	R317, 318	ERDS2TJ563	1/4W 56K
R85	ERDS2TJ103	1/4W 10K	R177	ERDS2TJ103	1/4W 10K	R319, 320	ERDS2TJ123	1/4W 12K
R86	ERDS2TJ102	1/4W 1K	R178	ERDS2TJ1R2	1/4W 1.2	R321, 322	ERDS2TJ104	1/4W 100K
R87, 88	ERDS2TJ122	1/4W 1.2K	R179, 180	ERDS2TJ472	1/4W 4.7K	R323, 324	ERDS2TJ102	1/4W 1K
R89	ERDS2TJ684	1/4W 680K	R181	ERDS2TJ332	1/4W 3.3K	R325, 326	ERDS2TJ222	1/4W 2.2K
R90	ERDS2TJ102	1/4W 1K	R182	ERDS2TJ1R0	1/4W 1.0	R327, 328	ERDS2TJ223	1/4W 22K

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
R329, 330	ERDS2TJ563	1/4W 56K	R503, 504	ERDS2TJ103	1/4W 10K	R608-618	ERDS2TJ104	1/4W 100K
R331, 332	ERDS2TJ562	1/4W 5.6K	R505-508	ERDS2TJ104	1/4W 100K	R619	ERDS2TJ103	1/4W 10K
R333, 334	ERDS2TJ223	1/4W 22K	R509 △	ERD25FJ470	1/4W 47	R620, 621	ERDS2TJ101	1/4W 100
R335, 336	ERDS2TJ102	1/4W 1K	R511	ERDS2TJ563	1/4W 56K	R622, 623	ERDS2TJ103	1/4W 10K
R337, 338	ERDS2TJ472	1/4W 4.7K	R512	ERDS2TJ103	1/4W 10K	R624	ERDS2TJ105T	1/4W 1M
R339	ERDS2TJ331	1/4W 330	R515, 516△	ERDS1FVJ100T	1/2W 10	R625	ERDS2TJ102	1/4W 1K
R341-344	ERDS2TJ103	1/4W 10K	R518	ERDS2TJ102	1/4W 1K	R626	ERDS2TJ103	1/4W 10K
R345, 346	ERDS2TJ273	1/4W 27K	R519, 520	ERDS2TJ221	1/4W 220	R627	ERDS2TJ224T	1/4W 220K
R347	ERDS2TJ394	1/4W 390K	R523	ERDS2TJ152	1/4W 1.5K	R628, 629	ERDS2TJ473	1/4W 47K
R348	ERDS2TJ393	1/4W 39K	R523A	ERDS2TJ181T	1/4W 180	R630	ERDS2TJ104	1/4W 100K
R349	ERDS2TJ224T	1/4W 220K	R524A	ERDS2TJ181T	1/4W 180	R631	ERDS2TJ103	1/4W 10K
R350	ERDS2TJ223	1/4W 22K	R524	ERQ12AJ560E	1/2W 56	R632	ERDS2TJ682T	1/4W 6.8K
R353-355	ERDS2TJ223	1/4W 22K	R525A	ERDS2TJ181T	1/4W 180	R633, 634	ERDS2TJ103	1/4W 10K
R356	ERDS2TJ152	1/4W 1.5K	R525	ERQ12AJ2R2E	1/2W 2.2	R635	ERDS2TJ225	1/4W 2.2M
R357	ERDS2TJ103	1/4W 10K	R526	ERDS2TJ151	1/4W 150	R636-642	ERDS2TJ122	1/4W 1.2K
R359	ERDS2TJ102	1/4W 1K	R526A	ERDS2TJ181T	1/4W 180	R643	ERDS2TJ104	1/4W 100K
R361	ERDS2TJ105T	1/4W 1M	R527 △	ERDS1FVJ182T	1/2W 1.8K	R644	ERDS2TJ220T	1/4W 22
R362	ERDS2TJ104	1/4W 100K	R528 △	ERDS1FVJ390T	1/2W 39	R645	ERDS2TJ271	1/4W 270
R363	ERDS2TJ332	1/4W 3.3K	R529	ERDS2TJ151	1/4W 150	R646	ERDS2TJ152	1/4W 1.5K
R364	ERDS2TJ393	1/4W 39K	R530	ERDS2TJ122	1/4W 1.2K	R647	ERDS2TJ471	1/4W 470
R365, 366	ERDS2TJ223	1/4W 22K	R531	ERDS2TJ102	1/4W 1K	R648	ERDS2TJ822	1/4W 8.2K
R367, 368	ERDS2TJ153	1/4W 15K	R532	ERDS2TJ823T	1/4W 82K	R649, 650	ERDS2TJ103	1/4W 10K
R369, 370	ERDS2TJ223	1/4W 22K	R533	ERDS2TJ563	1/4W 56K	R652	ERDS2TJ220T	1/4W 22
R371, 372	ERDS2TJ102	1/4W 1K	R534	ERDS2TJ222	1/4W 2.2K	R653	ERDS2TJ271	1/4W 270
R373-379	ERDS2TJ103	1/4W 10K	R535 △	ERDS1FVJ181T	1/2W 180	R654, 655	ERDS2TJ103	1/4W 10K
R380	ERDS2TJ104	1/4W 100K	R536, 537	ERDS2TJ562	1/4W 5.6K	R656	ERDS2TJ822	1/4W 8.2K
R381-383	ERDS2TJ103	1/4W 10K	R538 △	ERD2FCVJ8R2T	1/4W 8.2	R657, 658	ERDS2TJ103	1/4W 10K
R384	ERDS2TJ472	1/4W 4.7K	R539, 540	ERDS2TJ472	1/4W 4.7K	R659	ERDS2TJ822	1/4W 8.2K
R389	ERDS2TJ103	1/4W 10K	R541, 542	ERDS2TJ152	1/4W 1.5K	R660-664	ERDS2TJ102	1/4W 1K
R390	ERDS2TJ272T	1/4W 2.7K	R543 △	ERD2FCVJ8R2T	1/4W 8.2	R701	ERJ6GEYJ100	1/10W 10
R391	ERDS2TJ332	1/4W 3.3K	R544 △	ERD2FCVJ4R7T	1/4W 4.7	R702	ERJ6GEYJ471V	1/10W 470
R392-395	ERDS2TJ103	1/4W 10K	R545	ERDS2TJ822	1/4W 8.2K	R703	ERJ6GEYJ102A	1/10W 1K
R396	ERDS2TJ122	1/4W 1.2K	R551	ERDS2TJ102	1/4W 1K	R704	ERJ6GEYJ103V	1/10W 10K
R397, 398	ERDS2TJ102	1/4W 1K	R552	ERDS2TJ123	1/4W 12K	R706	ERJ6GEYJ473V	1/10W 47K
R399	ERDS2TJ122	1/4W 1.2K	R553	ERDS2TJ681	1/4W 680	R707	ERJ6GEYJ222V	1/10W 2.2K
R401, 402	ERDS2TJ123	1/4W 12K	R554	ERDS2TJ154	1/4W 150K	R708	ERJ6GEYJ683V	1/10W 68K
R403, 404	ERDS2TJ223	1/4W 22K	R555	ERDS2TJ101	1/4W 100	R709	ERJ6GEYJ122V	1/10W 1.2K
R405-408	ERDS2TJ822	1/4W 8.2K	R556	ERDS2TJ103	1/4W 10K	R710	ERJ6GEYJ182V	1/10W 1.8K
R409-424	ERDS2TJ224T	1/4W 220K	R557	ERDS2TJ122	1/4W 1.2K	R711	ERJ6GEYJ473V	1/10W 47K
R425, 426	ERDS2TJ102	1/4W 1K	R558	ERDS2TJ680T	1/4W 68	R712	ERJ6GEYJ471V	1/10W 470
R427, 428	ERDS2TJ823T	1/4W 82K	R559	ERQ16NWR10E	1W 0.1	R714	ERJ6GEYJ473V	1/10W 47K
R429, 430	ERDS2TJ104	1/4W 100K	R560	ERDS2TJ181T	1/4W 180	R715	ERJ6GEYJ223V	1/10W 22K
R451, 452	ERDS2TJ183T	1/4W 18K	R561	ERG1SJA70E	1W 47	R716	ERJ6GEYJ104V	1/10W 100K
R453, 454	ERDS2TJ102	1/4W 1K	R562	ERQ12AJ470E	1/2W 47	R717	ERJ6GEYJ682V	1/10W 6.8K
R455, 456	ERDS2TJ222	1/4W 2.2K	R563 △	ERDS1FVJ2R2T	1/2W 2.2	R718	ERJ6GEYJ223V	1/10W 22K
R457, 458	ERDS2TJ821	1/4W 820	R565, 566	ERDS2TJ100	1/4W 10 E/EB/EG/GN	R719	ERJ6GEYJ123V	1/10W 12K
R459, 460	ERDS2TJ102	1/4W 1K	R601, 602	ERDS2TJ104	1/4W 100K	R720	ERJ6GEYJ273V	1/10W 27K
R462	ERDS2TJ472	1/4W 4.7K	R603	ERDS2TJ102	1/4W 1K	R721	ERJ6GEYJ823	1/10W 82K
R463-465	ERDS2TJ104	1/4W 100K	R604	ERDS2TJ2R7T	1/4W 2.7	R722	ERJ6GEYJ102A	1/10W 1K
R466	ERG1SJ100E	1W 10	R605	ERDS2TJ105T	1/4W 1M	R723, 724	ERJ6GEYJ104V	1/10W 100K
R467	ERDS2TJ681	1/4W 680	R606	ERDS2TJ102	1/4W 1K	R725	ERJ6GEYJ471V	1/10W 470
R501, 502	ERDS2TJ102	1/4W 1K	R607	ERDS2TJ224T	1/4W 220K	R726	ERJ6GEYJ102A	1/10W 1K

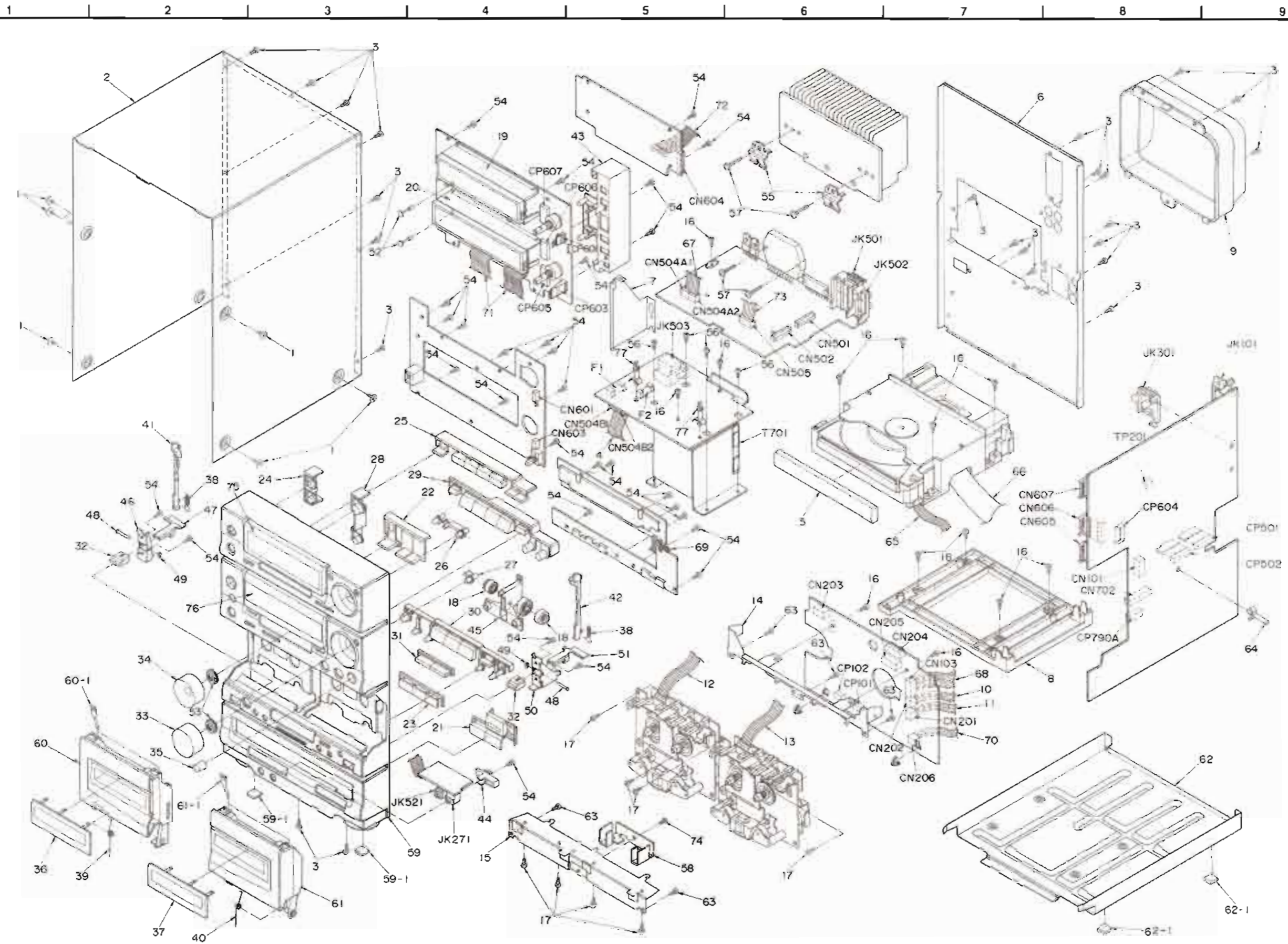
Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
R729, 730	ERJ6GEYJ102A	1/10W 1K	R909	ERDS2TJ222	1/4W 2.2K	R996	ERDS2TJ561	1/4W 560
R731	ERJ8GEYJ470V	1/8W 47	R910	ERDS2TJ272T	1/4W 2.7K	R997, 998	ERDS2TJ104	1/4W 100K
R732	ERJ6GEYJ562V	1/10W 5.6K	R911	ERDS2TJ472	1/4W 4.7K			
R733	ERJ6GEYJ332V	1/10W 3.3K	R912	ERDS2TJ682T	1/4W 6.8K			CAPACITORS
R734	ERJ6GEYJ562V	1/10W 5.6K	R913	ERDS2TJ103	1/4W 10K			
R735	ERJ6GEYJ222V	1/10W 2.2K	R914	ERDS2TJ223	1/4W 22K	C2	ECBT1E1032F	25V 0.01U
R736	ERJ6GEYJ682V	1/10W 6.8K	R915	ERDS2TJ683	1/4W 68K	C3	ECEA1VKA330B	35V 33U
R737-739	ERJ6GEYJ562V	1/10W 5.6K	R916	ERDS2TJ222	1/4W 2.2K	C4	ECEA1EKA4R7B	25V 4.7U
R741-743	ERJ6GEYJ102A	1/10W 1K	R917	ERDS2TJ152	1/4W 1.5K	C5	ECA1CM471B	16V 470U
R744	ERJ6GEYJ393V	1/10W 39K	R918	ERDS2TJ182	1/4W 1.8K	C6	ECBT1E1032F	25V 0.01U
R745, 746	ERJ6GEYJ102A	1/10W 1K	R919	ERDS2TJ222	1/4W 2.2K	C7	ECBT1H102KB5	50V 1000P
R747	ERJ6GEYJ473V	1/10W 47K	R920	ERDS2TJ332	1/4W 3.3K	C8	ECBT1H102KB5	50V 1000P
R748	ERJ8GEYJ180V	1/8W 18	R921	ERDS2TJ472	1/4W 4.7K	C9	ECCB1H473JF3	50V 0.047U
R749	ERJ6GEYJ101V	1/10W 100	R922	ERDS2TJ682T	1/4W 6.8K	C10	ECBT1H8R2KC5	50V 8.2P
R801, 802	ERDS2TJ472	1/4W 4.7K	R923	ERDS2TJ123	1/4W 12K	C11	ECBT1H180JC5	50V 18P
R803, 804	ERDS2TJ392T	1/4W 3.9K	R924	ERDS2TJ333	1/4W 33K	C12	ECEA1CKA100B	16V 10U
R805, 806	ERDS2TJ103	1/4W 10K	R925, 926	ERDS2TJ102	1/4W 1K	C13	ECBT1H104ZF5	50V 0.1U
R807, 808	ERDS2TJ153	1/4W 15K	R927	ERDS2TJ122	1/4W 1.2K	C14	ECBT1E2232F	25V 0.022U
R809, 810	ERDS2TJ224T	1/4W 220K	R928	ERDS2TJ182	1/4W 1.8K	C15	ECEA0JKA101B	6.3V 100U
R815, 816	ERDS2TJ202T	1/4W 2K	R929	ERDS2TJ222	1/4W 2.2K	C16	ECEA1HKA3R3B	50V 3.3U
R817, 818	ERDS2TJ683	1/4W 68K	R930	ERDS2TJ272T	1/4W 2.7K	C17-19	ECBT1C103KS5	16V 0.01U
R819, 820	ERDS2TJ682T	1/4W 6.8K	R931	ERDS2TJ472	1/4W 4.7K	C20	ECBT1H150JC5	50V 15P
R821	ERDS2TJ105T	1/4W 1M	R932	ERDS2TJ682T	1/4W 6.8K	C21	ECCRIH680JSS	50V 68P
R823	ERDS2TJ474	1/4W 470K	R933	ERDS2TJ103	1/4W 10K	C22	ECBT1E2232F	25V 0.022U
R824	ERDS2TJ102	1/4W 1K	R934	ERDS2TJ223	1/4W 22K	C23	ECBT1H101KB5	50V 100P
R825, 826	ERDS2TJ472	1/4W 4.7K	R935	ERDS2TJ683	1/4W 68K	C24	ECEA1CKA100B	16V 10U
R827, 828	ERDS2TJ152	1/4W 1.5K	R936, 937	ERDS2TJ102	1/4W 1K	C25	ECBT1E1032F	25V 0.01U
R829, 830	ERDS2TJ473	1/4W 47K	R938	ERDS2TJ122	1/4W 1.2K	C26	ECEA1HKA3R3B	50V 3.3U
R831, 832	ERDS2TJ102	1/4W 1K	R939	ERDS2TJ182	1/4W 1.8K	C27, 28	ECBT1H150JC5	50V 15P
R833	ERDS2TJ105T	1/4W 1M	R940	ERDS2TJ222	1/4W 2.2K	C29	ECBT1H102KB5	50V 1000P
R834	ERDS2TJ334	1/4W 330K	R951	ERDS2TJ103	1/4W 10K	C30	ECEA1AKA101B	10V 100U
R835, 836	ERDS2TJ222	1/4W 2.2K	R952, 953	ERDS2TJ104	1/4W 100K	C34	ECEA1CKA100B	16V 10U
R837	ERDS2TJ105T	1/4W 1M	R954	ERDS2TJ823T	1/4W 82K	C35	ECEA1AKA470B	10V 47U
R838	ERDS2TJ334	1/4W 330K	R955	ERDS2TJ102	1/4W 1K	C36	ECCQ1H102KZT	50V 1000P
R839	ERDS2TJ152	1/4W 1.5K	R956	ERDS2TJ331	1/4W 330	C37	ECEA1HKAR47B	50V 0.47U
R840	ERDS2TJ472	1/4W 4.7K	R958	ERDS2TJ224T	1/4W 220K	C38	ECEA1HKAR33B	50V 0.33U
R841	ERDS2TJ103	1/4W 10K	R959	ERDS2TJ473	1/4W 47K	C39	ECBT1C103KS5	16V 0.01U
R842	ERDS2TJ473	1/4W 47K	R960	ERDS2TJ102	1/4W 1K	C40	ECEA1HKA010B	50V 1U
R861-864	ERDS2TJ331	1/4W 330	R961, 962	ERDS2TJ104	1/4W 100K	C41, 42	ECFR1E123KR	25V 0.012U
R865, 866	ERDS2TJ473	1/4W 47K	R963, 964	ERDS2TJ474	1/4W 470K	C43, 44	ECEA1CKA100B	16V 10U
R867, 868	ERDS2TJ271	1/4W 270	R965	ERDS2TJ473	1/4W 47K	C45	ECBT1H102KB5	50V 1000P
R869, 870	ERDS2TJ680T	1/4W 68	R966, 967	ERDS2TJ472	1/4W 4.7K	C50, 51	ECBT1H102KB5	50V 1000P
R871, 872	ERDS2TJ184T	1/4W 180K	R968	ERDS2TJ473	1/4W 47K	C53	ECBT1H102KB5	50V 1000P
R873, 874	ERDS2TJ123	1/4W 12K	R970	ERDS2TJ472	1/4W 4.7K	C56	ECBT1C103KS5	16V 0.01U
R875, 876	ERDS2TJ224T	1/4W 220K	R971	ERDS2TJ104	1/4W 100K	C57	ECEA1AKA101B	10V 100U
R901	ERDS2TJ102	1/4W 1K	R972	ERDS2TJ103	1/4W 10K	C58	ECBT1H102KB5	50V 1000P
R902	ERDS2TJ222	1/4W 2.2K	R973	ERDS2TJ224T	1/4W 220K	C61	ECEA1CKA220B	16V 22U
R903	ERDS2TJ182	1/4W 1.8K	R974	ERDS2TJ103	1/4W 10K	C81	ECBT1H101KB5	50V 100P
R904	ERDS2TJ222	1/4W 2.2K	R975	ERDS2TJ102T	1/4W 1K (GC)	C83	ECBT1C103KS5	16V 0.01U
R905, 906	ERDS2TJ102	1/4W 1K	R981-984	ERDS2TJ102	1/4W 1K	C90	ECBT1H3R3KC5	50V 3.3P
R907	ERDS2TJ122	1/4W 1.2K	R985-988	ERDS2TJ103	1/4W 10K	C91	ECCRIH820JSS	50V 82P
R908	ERDS2TJ182	1/4W 1.8K	R989-995	ERDS2TJ104	1/4W 100K	C92	ECBT1H471KB5	50V 470P

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
C93, 94	ECFR1E392KR	25V 3900P	C186	ECEAJKA470B	6.3V 47U	C437, 438	ECBT1C562KR5	16V 5600P
C101, 102	ECBT1H102KB5	50V 1000P	C187, 188	ECBT1H101KB5	50V 100P	C439, 440	ECBT1C103KS5	16V 0.01U
C103	ECBA1H681KB5	50V 680P	C189	ECQP2A22ZJZT	100V 2200P	C441, 442	ECBT1C222KR5	16V 2200P
C104	ECFR1C223MR	16V 0.022U	C190	ECBT1C103MS5	16V 0.01U	C443, 444	ECBT1C472KR5	16V 4700P
C105, 106	ECBT1H471KB5	50V 470P	C201	ECEA1CKA101B	16V 100U	C445, 446	ECBT1C122KR5	16V 1200P
C107	ECBA1H681KB5	50V 680P	C202	ECBT1H104ZF5	50V 0.1U	C449	ECBT1E103ZF	25V 0.01U
C108	ECEA1AKA330B	10V 33U	C271	ECBT1H102KB5	50V 1000P	C450	ECEA1AKA470B	10V 47U
C109	ECEA1AKA101B	10V 100U	C300	ECBT1H104ZF5	50V 0.1U	C451, 452	ECBT1C103KS5	16V 0.01U
C111, 112	ECBT1H471KB5	50V 470P	C301	ECBT1H102KB5	50V 1000P	C453	ECBT1E103ZF	25V 0.01U
C113, 114	ECEAJKA221B	6.3V 220U	C302, 303	ECBT1H104ZF5	50V 0.1U	C454	ECEA1CKA101B	16V 100U
C115, 116	ECFR1C333JR	16V 0.033U	C304	ECBT1E103ZF	25V 0.01U	C503, 504	ECBT1H331KB5	50V 330P
C117, 118	ECEA1HKA010B	50V 1U	C305-308	ECEA1HKA3R3B	50V 3.3U	C505, 506	ECBT1H821KB5	50V 820P
C119, 120	ECEA1EKA4R7B	25V 4.7U	C309, 310	ECBT1E103ZF	25V 0.01U	C507, 508	ECBT1H150J5	50V 15P
C121, 122	ECEA1HKA010B	50V 1U	C311	ECFR1C123MR	16V 0.012U	C509	ECEAJKA470B	6.3V 47U
C123, 124	ECBT1H102KB5	50V 1000P	C312	ECFR1C683KR	16V 0.068U	C510	ECEA1CKA100B	16V 10U
C125, 126	ECFR1E104KR	25V 0.1U	C313	ECFR1C823MR	16V 0.082U	C511, 512	ECKT1H223ZF	50V 0.022U
C127, 128	ECBT1C332KR5	16V 3300P	C314	ECEA1HKA3R3B	50V 3.3U	C513, 514	ECEA1HKAR68B	50V 0.68U
C129, 130	ECBT1H151KB5	50V 150P	C315, 316	ECBT1H3R3KC5	50V 3.3P	C515	ECBT1E223ZF	25V 0.022U
C131, 132	ECBT1H221KB5	50V 220P	C319, 320	ECBT1E103ZF	25V 0.01U	C520, 521	ECEA1CKA101B	16V 100U
C133, 134	ECEA1EKA4R7B	25V 4.7U	C321	ECBT1C103KS5	16V 0.01U	C522, 523	ECEAJKA101B	6.3V 100U
C135, 136	ECBT1H102KB5	50V 1000P	C322	ECBT1H102KB5	50V 1000P	C524, 525	ECEA1EKA4R7B	25V 4.7U
C137, 138	ECFR1C183KR	16V 0.018U	C323	ECBT1H330J5	50V 33P	C528	ECEA1AKA101B	10V 100U
C139	ECEA1HKA2R2B	50V 2.2U	C324	ECBT1H102KB5	50V 1000P	C529	ECKR1H103ZF5	50V 0.01U
C140	ECEA1CKA100B	16V 10U	C325	ECA1AM471B	10V 470U	C530	ECEA1HJ222B	50V 2200U E/EB/EG/GM
C141	ECEA1HKA0R1B	50V 0.1U	C326	ECBT1C103KS5	16V 0.01U	C530	ECEA1VJ332B	35V 3300U (GC)
C142	ECFR1C223MR	16V 0.022U	C327, 328	ECBT1H102KB5	50V 1000P	C531-534	ECKR1H103ZF5	50V 0.01U
C143, 144	ECEA1HKA010B	50V 1U	C329	ECEA1HKA010B	50V 1U	C535	ECEA1CKA101B	16V 100U
C145, 146	ECEA1CKA100B	16V 10U	C330	ECBT1E103ZF	25V 0.01U	C536	ECBT1E103ZF	25V 0.01U
C150	ECEAJKA470B	6.3V 47U	C331, 332	ECEA1HKA3R3B	50V 3.3U	C537	ECEA1CKA101B	16V 100U
C151, 152	ECEA1HKA010B	50V 1U	C334, 335	ECBT1C472KR5	16V 4700P	C538, 539	ECKR1H103ZF5	50V 0.01U
C153, 154	ECBT1H331KB5	50V 330P	C337	ECBT1H104ZF5	50V 0.1U	C540	ECEA1HKA2R2B	50V 2.2U
C155, 156	ECEA1CKA100B	16V 10U	C338	ECBT1H102KB5	50V 1000P	C541, 542	ECEA1HJ222B	50V 2200U E/EB/EG/GM
C157, 158	ECBA1H681KB5	50V 680P	C339	ECBT1C103KS5	16V 0.01U	C541, 542	ECA1HM332B	50V 3300U (GC)
C159, 160	ECBT1C682KR5	16V 6800P	C340	ECEA1CKA100B	16V 10U	C543	ECQE2104KF3	250V 0.1U
C161	ECEA1CKA101B	16V 100U	C341, 342	ECEA1HKA010B	50V 1U	C544	ECA1HM470B	50V 47U
C162	ECA0JM471B	6.3V 470U	C343	ECEA1EKA100B	25V 10U	C545	ECKR1H103ZF5	50V 0.01U
C163, 164	ECEA1HKA010B	50V 1U	C344	ECBT1H561KB5	50V 560P	C546	ECA1HM101B	50V 100U
C165, 166	ECEA1CKA100B	16V 10U	C345	ECBT1H101KB5	50V 100P	C547	ECEA1HKA220B	50V 22U
C167, 168	ECEA502R68	50V 0.68U	C403, 404	ECBT1H391KB5	50V 390P	C548	ECBT1E103ZF	25V 0.01U
C169, 170	ECEA1EKA4R7B	25V 4.7U	C405-408	ECEA1HKA3R3B	50V 3.3U	C549	ECA1HM101B	50V 100U
C171	ECEAJKA470B	6.3V 47U	C409, 410	ECEA1CKA220B	16V 22U	C551, 552	ECBT1E103ZF	25V 0.01U
C173	ECBT1C103MS5	16V 0.01U	C411-416	ECBT1E103ZF	25V 0.01U	C553	ECEA1HKA3R3B	50V 3.3U
C174	ECEA1HKA010B	50V 1U	C417, 418	ECEA1CKA220B	16V 22U	C554, 555	ECBT1H101KB5	50V 100P
C175	ECEA1CKA101B	16V 100U	C419, 420	ECEA1HKA010B	50V 1U	C556	ECEA1HKAR47B	50V 0.47U
C176	ECQV1H473JZ3	50V 0.047U	C421, 422	ECEA1HKAR22B	50V 0.22U	C557	ECEA1CKA220B	16V 22U
C177, 178	ECBT1H102KB5	50V 1000P	C423, 424	ECEA1HKA3R3B	50V 0.33U	C558	ECEA1HKA010B	50V 1U
C179, 180	ECFR1C103KR	16V 0.01U	C425, 426	ECEA1HKA0R1B	50V 0.1U	C563-567	ECBT1H102KB5	50V 1000P E/EB/EG/GM
C181	ECBT1C103MS5	16V 0.01U	C427, 428	ECEA1HKAR15B	50V 0.15U	C601	ECEA1AKA220B	10V 22U
C182	ECEAJKA470B	6.3V 47U	C429, 430	ECFR1C333KR	16V 0.033U	C602	ECBT1E223ZF	25V 0.022U
C183	ECQV1H474JZ3	50V 0.47U	C431, 432	ECQB1H683JF3	50V 0.068U	C604	ECBT1E223ZF	25V 0.022U
C184	ECQP2A152JZT	100V 1500P	C433, 434	ECFR1C153KR	16V 0.015U	C605, 606	ECEA1HKA3R3B	50V 3.3U
C185	ECQP2E472JZT	250V 4700P	C435, 436	ECFR1C273JR	16V 0.027U	C607	ECEA1HKA010B	50V 1U

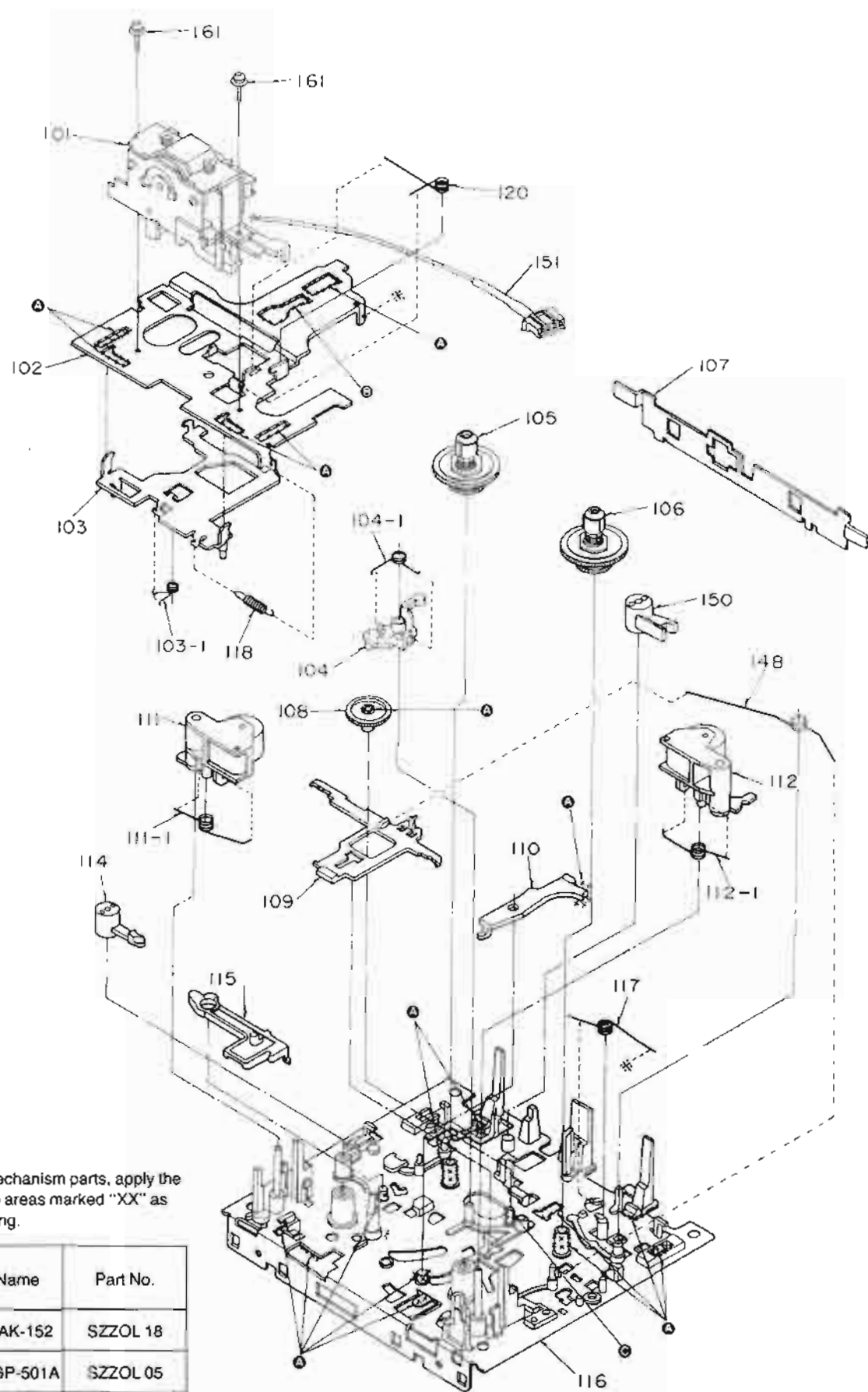
Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
C608	ECEA1HKA3R3B	50V 3.3U	C742	ECUZ1C104MBM	16V 0.1U	C963	ECEA1AKA330B	10V 33U
C611	ECBT1E103ZF	25V 0.01U	C743	ECEA0JKS3311	6.3V 330U	C964, 965	ECBT1H102KB5	50V 1000P
C612	ECEA1AKA220B	10V 22U	C744, 745	ECUE1H102KBN	50V 1000P	C966	ECBT1C103MS5	16V 0.01U
C613	ECBT1E103ZF	25V 0.01U	C746	ECEA0JKS1011	6.3V 100U	C967	ECEA1AKA220B	10V 22U
C614	ECA0JM471B	6.3V 470U	C747	ECUZ1C104MBM	16V 0.1U	C968	ECEA1HKA010B	50V 1U
C615	ECBT1E103ZF	25V 0.01U	C748	ECEA1HKS010	50V 1U			
C616	ECEA1HKA3R3B	50V 3.3U	C749	ECUW1E103MBN	25V 0.01U			JUMPERS
C617-620	ECEA1HKA010B	50V 1U	C750	ECUE1H050DCN	50V 5P			
C621, 622	ECFR1C683KR	16V 0.068U	C751	ECUZ1C224KBM	16V 0.22U	RJ701	ERJ6GEY0R00A	JUMPER
C623, 624	ECBT1E103ZF	25V 0.01U	C752	ECUZ1C104MBM	16V 0.1U	RJ703-710	ERJ6GEY0R00A	JUMPER
C625	ECEA1AKA330B	10V 33U	C753, 754	ECEA1HKS010	50V 1U			
C626	ECBT1H102KB5	50V 1000P	C755	ECUZ1C104MBM	16V 0.1U			
C627	ECEA1HKA010B	50V 1U	C756, 757	ECUE1H050DCN	50V 5P			
C629	ECEA1AKA330B	10V 33U	C758	ECUZ1C224KBM	16V 0.22U			
C630	ECBT1H102KB5	50V 1000P	C763	ECUW1E103MBN	25V 0.01U			
C631	ECEA1CKA100B	16V 10U	C764	ECUE1H331KBN	50V 330P			
C632	ECBT1H102KB5	50V 1000P	C790	ECA1AKF820E	10V 82U			
C633	ECBT1H101KB5	50V 100P	C801, 802	ECEA1HKA3R3B	50V 3.3U			
C635	ECEA1HKA010B	50V 1U	C803	ECBT1E103ZF	25V 0.01U			
C701	ECEA0JKA220	6.3V 22U	C804	ECEA1CKA220B	16V 22U			
C702	ECEA0JKS470	6.3V 47U	C805	ECEA1CKA100B	16V 10U			
C703	ECEA0JKS1011	6.3V 100U	C806	ECA1CM221B	16V 220U			
C709	ECUZ1C224KBM	16V 0.22U	C807, 808	ECEA1HKAR33B	50V 0.33U			
C710	ECUZ1C104MBM	16V 0.1U	C809, 810	ECBT1H3R3KC5	50V 3.3P			
C711	ECUW1E103MBN	25V 0.01U	C811, 812	ECEA1HKA3R3B	50V 3.3U			
C713	ECEA1CSN4R71	16V 4.7U	C813, 814	ECBT1E103ZF	25V 0.01U			
C714	ECEA1HKS010	50V 1U	C815, 816	ECEA1HKAR33B	50V 0.33U			
C715	ECUE1H472KBN	50V 4700U	C817, 818	ECEA1HKAR22B	50V 0.22U			
C716	ECUE1C473KBN	16V 0.047U	C819	ECEA0JKA101B	6.3V 100U			
C717	ECUE1H681KBN	50V 680P	C820	ECEA1HKA010B	50V 1U			
C718	ECEA1AKS1011	10V 100U	C821, 822	ECFR1E563KR	25V 0.056U			
C719	ECUW1E103MBN	25V 0.01U	C823, 824	ECEA1HKAR68B	50V 0.68U			
C720	ECUE1E153MBN	25V 0.015U	C825, 826	ECBT1H101KB5	50V 100P			
C721	ECUW1E103MBN	25V 0.01U	C861-864	ECBT1H101KB5	50V 100P			
C722	ECEA0JKS470	6.3V 47U	C865, 866	ECBT1H221KB5	50V 220P			
C723	ECUZ1C104MBM	16V 0.1U	C867, 868	ECEA1AKA330B	10V 33U			
C724	ECUV1E333MBN	25V 0.033U	C869, 870	ECBT1H102KB5	50V 1000P			
C725	ECUW1E103MBN	25V 0.01U	C871, 872	ECFR1E223KR	25V 0.022U			
C726	ECUE1H471KBN	50V 470P	C873, 874	ECFR1E682KR	25V 6800P			
C727	ECEA0JKS470	6.3V 47U	C875, 876	ECEA1HKA3R3B	50V 3.3U			
C728, 729	ECUZ1C104MBM	16V 0.1U	C877, 878	ECBT1H104ZF5	50V 0.1U			
C730	ECUZ1C224KBM	16V 0.22U	C891, 892	ECBT1H101KB5	50V 100P			
C731	ECEA0JKS3311	6.3V 330U	C901-905	ECBT1H561KB5	50V 560P			
C732	ECUE1H102MBN	50V 1000P	C951-953	ECBT1H561KB5	50V 560P			
C733	ECEA0JKS1011	6.3V 100U	C954	ECBT1H102KB5	50V 1000P			
C734	ECUE1E223MBN	25V 0.022U	C955	ECA0JM102B	6.3V 1000U			
C735	ECUZ1C224KBM	16V 0.22U	C956	ECCF5RSU473	5.5V 0.047U			
C737	ECUZ1C224KBM	16V 0.22U	C957	ECA0JKF470B	6.3V 47U			
C738	ECEA0JKS1011	6.3V 100U	C959	ECBT1H150JC5	50V 15P			
C739	ECUW1E103MBN	25V 0.01U	C960	ECBT1H220JC5	50V 22P			
C740	ECUE1H472MBN	50V 4700P	C961	ECEA1HKA010B	50V 1U			
C741	ECUZ1C224KBM	16V 0.22U	C962	ECBT1C103MS5	16V 0.01U			

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS		47	RML0230	EJECT ANGLE (L)	
				48	RMS0242	SHAFT	
1	RHD30007	SCREW		49	XJC2FT	E-RING	
2	RKMD181-K	CABINET		50	RMA0504	EJECT ANGLE (R)	
3	XTBS3+8JFZ1	SCREW		51	RML0231	EJECT ANGLE (R)	
4	REZD415-1	FLAT CABLE (9P)		52	SHR9755	LATCH	
5	RGKD418-K	TRAY ORNAMENT		53	SNE4021-1	NUJ	
6	RGRD130B-A	REAR PANEL	(E)	54	XTBS26+8J	SCREW	
6	RGRD130B-B	REAR PANEL	(EB)	55	SUS894-1	SPRING	
6	RGRD130B-D	REAR PANEL	(EG)	56	XTB3+6FFZ	SCREW	
6	RGRD130C-A	REAR PANEL	(GC)	57	XTB3+16JFZ	SCREW	
6	RGRD130B-C	REAR PANEL	(GN)	58	RMQ0265	DAMPER GEAR COVER	
7	RMND147	ANGLE		59	RFKACH55E-K	FRONT PANEL ASS'Y	
8	RMRO479-W	CHASSIS		59-1	SHG1654	FOOT	
9	RMV0041	HEAT SINK COVER		60	RFKACH55NAK	CASSETTE LID (L) ASS'Y	
10	RWJ1804060QQ	FLAT CABLE (4P)		60-1	QBP2006A	SPRING	
11	RWJ1804150QQ	FLAT CABLE (4P)		61	RFKACH55NBK	CASSETTE LID (R) ASS'Y	
12	RWJ0207120QQ	FLAT CABLE (7P)		61-1	QBP2006A	SPRING	
13	RWJ0210120QQ	FLAT CABLE (10P)		62	RFKACH55N-K	BOTTOM BOARD ASS'Y	
14	RMA0501	ANGLE (UPPER)		62-1	SHG1654	FOOT	
15	RMA0502	ANGLE (LOWER)		63	XTB3+10JFZ	SCREW	
16	XTB3+8JFZ	SCREW		64	RMS0340	HOLDER	
17	XTN26+68	SCREW		65	REX0295	FLAT CABLE (6P)	
18	RDGD145	DAMPER GEAR		66	RWJ5223170EX	FLEXIBLE CABLE (23P)	
19	RMND145	FL. HOLDER (MAIN)		67	RWJ1809090QQ	FLAT CABLE (9P)	
20	RMND146	FL. HOLDER (SPEC. ANALYZER)		68	RWJ0209090QQ	FLAT CABLE (9P)	
21	RGUD633-K	OPEN/CLOSE BUTTON		69	RWJ1803065KK	FLAT CABLE (3P)	
22	RGUD634-K	G. EQUALIZER BUTTON		70	RWJ1804150KQ	FLAT CABLE (4P)	
23	RGUD635-K	SKIP/SEARCH/PAUSE BUTTON		71	RWJ1812100CC	FLAT CABLE (12P)	
24	RGUD636-K1	TIMER PLAY/REC. BUTTON		72	RWJ0210130QQ	FLAT CABLE (10P)	
25	RGUD637-K	OPERATIONS (TUNER) BUTTON		73	RWJ0208330KQ	FLAT CABLE (8P)	
26	RGUD638-K	CANCEL/SET BUTTON		74	XTB3+12JFZ	SCREW	
27	RGUD639-K	VOL. PRESET BUTTON		75	RKW0177-K1	FL. PANEL	
28	RGUD640-K1	POWER/SUPER BASS BUTTON		76	RKW0178-K	FL. PANEL	
29	RGUD641A-K	OPERATIONS (AMPLIFIER) BUTTON		77	SHR9755	LATCH	
30	RGUD642-K1	OPERATIONS (DECK) BUTTON					
31	RGUD643-K	FF/REW (M. S.) BUTTON					
32	RGUD644-K	EJECT BUTTON					
33	RGWD113-K1	MAIN VOLUME KNOB					
34	RGWD128-K	AI JOG KNOB					
35	RGWD129-K	MIC VOLUME KNOB					
36	RKW0179-K	CASSETTE ORNAMENT (L)					
37	RKW0180-K	CASSETTE ORNAMENT (R)					
38	RMBO209	SPRING					
39	RMBO211	SPRING					
40	RMBO214	SPRING					
41	RMMD077-1	EJECT ROD (L)					
42	RMMD078-1	EJECT ROD (R)					
43	RMRO478A-W	SUPPORT					
44	RMRO478B-W	HOLDER					
45	RMS0324	SUPPORT					
46	RMA0503	EJECT ANGLE (L)					

CABINET PARTS LOCATION

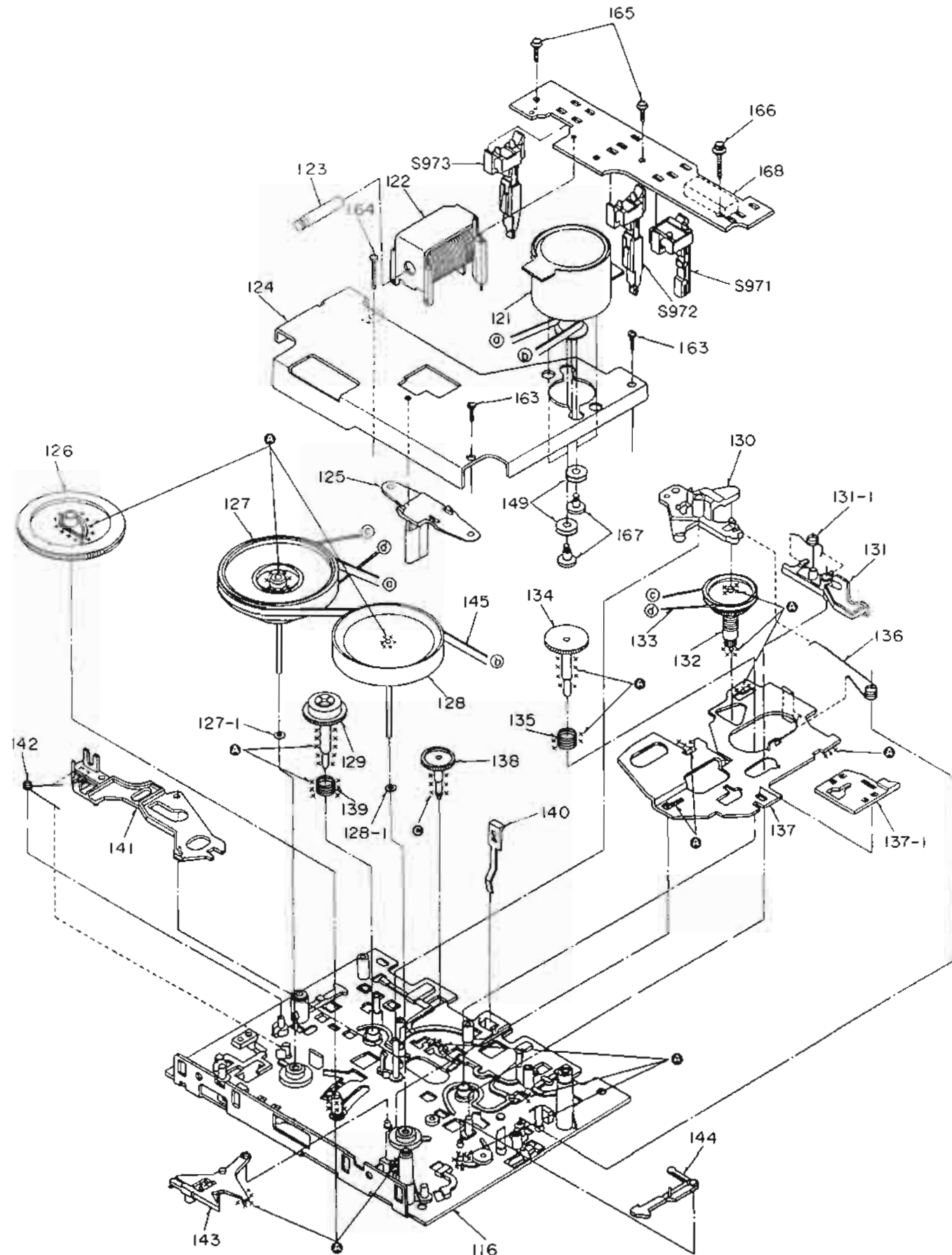


MECHANISM PARTS LOCATION • DECK 1



Note:
When changing mechanism parts, apply the specified grease to areas marked "XX" as shown in the drawing.

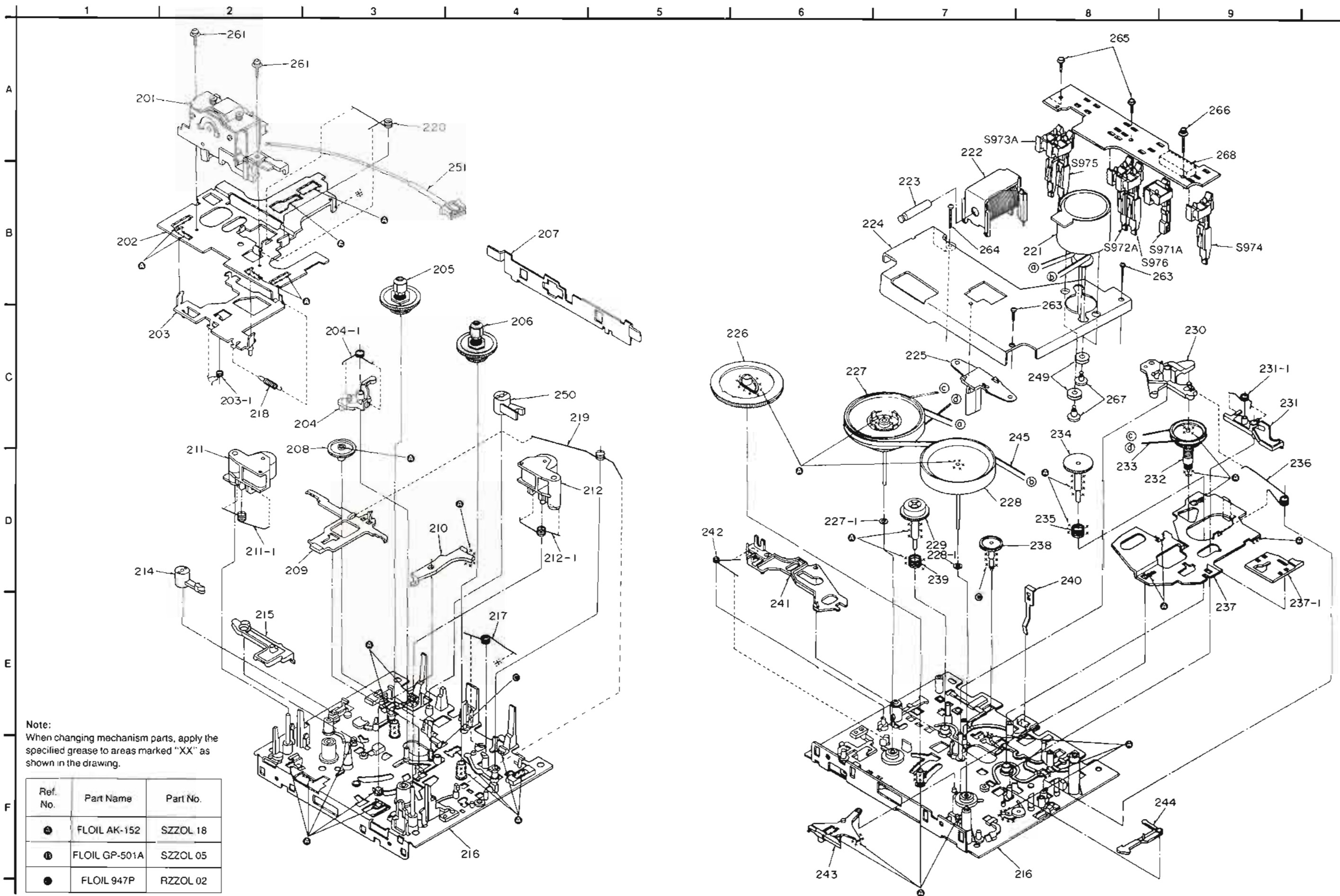
Ref. No.	Part Name	Part No.
①	FLOIL AK-152	SZZOL 18
②	FLOIL GP-501A	SZZOL 05
③	FLOIL 947P	RZZOL 02



Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		MECHANISM PARTS LIST		143	RUBS15ZA	LEVER	
				144	RUBS09ZA	LEVER	
				145	RDV108ZA	CAPSTAN BELT	
(DECK 1)				148	RUW144ZA	SPRING	
101	RXQ0051-1	HEAD BLOCK (PLAY)		149	RHG3032ZA	RUBBER CUSHION	
102	RUA793ZF	HEAD BASE		150	RNL180ZB	DAMPER ARM	
103	RZLAR300	ROD		151	REX0132	LEAD WIRE (4P)	
103-1	RUW143ZA	SPRING		161	XTW2-6L	SCREW	
104	1UB0089ZA	ARM		163	XTN26-7J	SCREW	
104-1	RUW148ZA	SPRING		164	RHE5203ZA	SCREW	
105	1DM0018ZB	REEL TABLE (R)		165	XTW2-8S	SCREW	
106	1DM0017ZB	REEL TABLE (F)		166	XYC2-JF16	SCREW	
107	RML0069-1	LEVER		167	RHD26002	SCREW	
108	RDG5772ZC	GEAR		168	RJS7T7ZA	SOCKET (7P)	
109	RUB508ZB	BRACKET ROD					
110	RUB506ZB	LEVER					
111	1UB0088ZB	PINCH ROLLER (R)					
111-1	RUW141ZA	SPRING					
112	1UB0087ZB	PINCH ROLLER (F)					
112-1	RUW140ZC	SPRING					
114	RNL1ZD	DAMPER ARM					
115	RUB503ZD	MAIN LEVER					
116	RFKRPSCH9N	CHASSIS ASS'Y					
117	RUW142ZA	SPRING					
118	RUJ105ZA	SPRING					
120	RUW139ZA	SPRING					
121	RFKRPSCH9N	DC MOTOR ASS'Y					
122	1UE0015ZA	PLUNGER					
123	RUB428ZE	MOVING IRON CORE					
124	RMA0101-1	ANGLE					
125	RMD5014ZC	ANGLE					
126	RDG5927ZG	MAIN GEAR					
127	1DW0037ZB	FLYWHEEL (F)					
127-1	RNW139ZA	WASHER					
128	1DW0038ZB	FLYWHEEL (R)					
128-1	RNW138ZA	WASHER					
129	1DG0006ZB	REEL TABLE GEAR					
130	RUB513ZD	ARM					
131	1UB0091ZA	LEVER					
131-1	RUW146ZA	SPRING					
132	1DR0011ZB	MAIN PULLEY					
133	RDV902B	BELT					
134	RDG5769ZA	REEL TABLE GEAR					
135	RUQ111ZB	SPRING					
136	RUW145ZA	SPRING					
137	1UB0090ZA	ROD					
137-1	RUB512ZB	ROD					
138	RDG5773ZB	GEAR					
139	RUQ112ZA	SPRING					
140	RUSS09ZC	TAPE PRESSURE SPRING					
141	RUB514ZC	LEVER					
142	RUW147ZA	SPRING					

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		MECHANISM PARTS LIST		242	RJW1472A	SPRING	
				243	RUB5152A	LEVER	
(DECK 2)				244	RUB5092A	LEVER	
201	RXQ007-2	HEAD BLOCK (REC/PLAYBACK)		245	RDV1082A	CAPSTAN BELT	
202	RJA7932F	HEAD BASE		249	RHG30322A	RUBBER CUSHION	
203	RZLAR300	ROD		250	RNL1802B	DAMPER ARM	
203-1	RJW1432A	SPRING		251	REX0172	LEAD WIRE (5P)	
204	IUB00892A	ARM		261	XTW2-6L	SCREW	
204-1	RJW1482A	SPRING		263	XTN26-7J	SCREW	
205	1DM00182B	REEL TABLE (R)		264	RHES2032A	SCREW	
206	1DM00172B	REEL TABLE (F)		265	XTW2-8S	SCREW	
207	RML0069-1	LEVER		266	XYC2-JF16	SCREW	
208	RDG57722C	GEAR		267	RHD26002	SCREW	
209	RUB5082B	BRACKET ROD		268	RJS10772A	SOCKET (10P)	
210	RUB5062B	LEVER					
211	IUB00882B	PINCH ROLLER (R)					
211-1	RJW1412A	SPRING					
212	IUB00872B	PINCH ROLLER (F)					
212-1	RJW1402C	SPRING					
214	RNL12D	DAMPER ARM					
215	RUB5032D	MAIN LEVER					
216	RFKRRSCH9N	CHASSIS ASS'Y					
217	RJW1422A	SPRING					
218	RJD1052A	SPRING					
219	RJW1442A	SPRING					
220	RJW1392A	SPRING					
221	RFM1332A	DC MOTOR					
222	IUED0152A	PLUNGER					
223	RUB4282E	MOVING IRON CORE					
224	RMA0101-1	ANGLE					
225	RMD50142C	ANGLE					
226	RDG59272G	MAIN GEAR					
227	1DW00372B	FLYWHEEL (F)					
227-1	RNW1392A	WASHER					
228	1DW00382B	FLYWHEEL (R)					
228-1	RNW1382A	WASHER					
229	1DG00062B	REEL TABLE GEAR					
230	RUB5132D	ARM					
231	IUB00912A	LEVER					
231-1	RJW1462A	SPRING					
232	1DR00112B	MAIN PULLEY					
233	RDV902B	BELT					
234	RDG57692A	REEL TABLE GEAR					
235	RJQ1112B	SPRING					
236	RJW1452A	SPRING					
237	IUB00902A	ROD					
237-1	RUB5122B	ROD					
238	RDG57732B	GEAR					
239	RJQ1122A	SPRING					
240	RUS6092C	TAPE PRESSURE SPRING					
241	RUB5142C	LEVER					

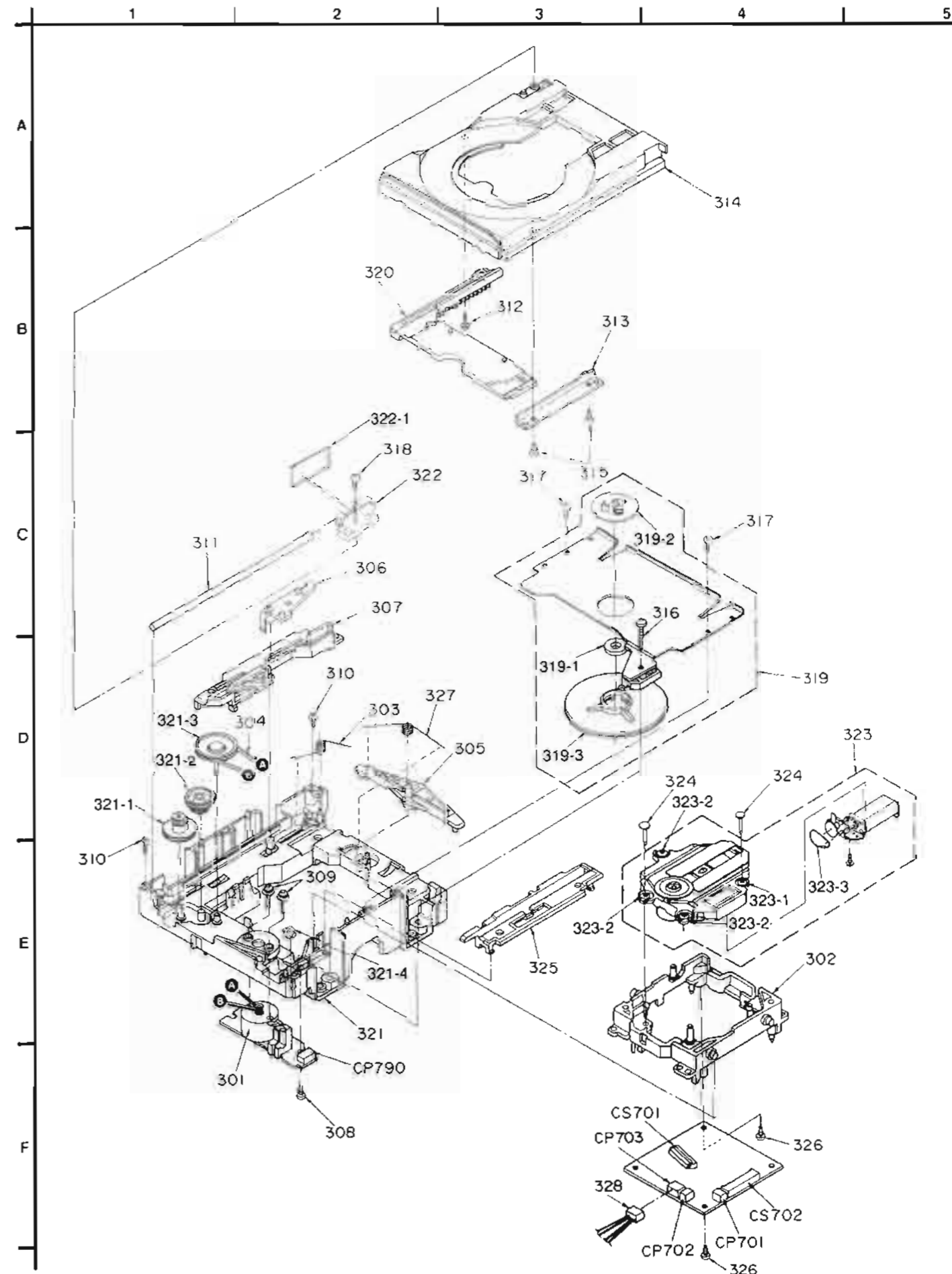
MECHANISM PARTS LOCATION • DECK 2



■ CABINET PARTS LOCATION (Loading unit parts)

Ref. No.	Part No.	Part Name & Description	Remarks
		LOADING UNIT PARTS	
301	MEM0019	MOTOR ASS'Y	
302	RM00105	CHASSIS	
303	RM00063	SPRING	
304	RM00158	BELT	
305	RM00177	LEVER	
306	RM00178	LEVER	
307	RM00058	SLIDE PLATE 1	
308	XTN26+6G	SCREW	
309	XYN2+F6FZ	SCREW	
310	RHD20010	SCREW	
311	RM00046	GUIDE SHAFT	
312	RHD20009-1	SCREW	
313	RM00328	HOLDER	
314	RM00103	DISK TRAY	
315	XTN2+8G	SCREW	
316	XTB3+25GFZ	SCREW	
317	XTN26+6G	SCREW	
318	XTN3+8LFZ	SCREW	
319	RM00122	TRAY HOLDER	
319-1	RM0245ZA	WADNET	
319-2	RM00334	HOLDER	
319-3	RM00123	DISK HOLDER	
320	RFKXNDT77B-H	GEAR ASS'Y	
321	RFKXJXD77-H	CHASSIS ASS'Y	
321-1	RDG0142	GEAR	
321-2	RDG0143	DRIVE GEAR 1	
321-3	RDPO041	PULLEY	
321-4	SDRD14	ROLLER B	
322	RFKXNDT77C-H	HOLDER	
322-1	RM00159	RUBBER	
323	SODD1102	TRAVERSE UNIT	
323-1	SHD112	RUBBER A	
323-2	SHD113-1	RUBBER B	
323-3	RDV0014	BELT	
324	MS0123-1	PIN	
325	RM00059	SLIDE PLATE 2	
326	XTV26+6G	SCREW	
327	IME00047	SPRING	
328	ME00217-1	SOCKET (4P)	

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPG1098	PACKING CASE	(E/EB/EG)
P1	RPG1099	PACKING CASE	(GC/GN)
P2	RM00546	PAD	
P3	RPQFD032	ACCESSORY BOX	
P4	SPB1061	PROTECTION COVER (MANUAL)	
		ACCESSORIES	
A1	RAK-SC306W	REMOTE CONTROLLER	
A1-1	RKND1120-K	BATTERY COVER	
A2	RFKSACH55E-K	INSTRUCTIONS MANUAL	(E)
A1	RQT1322-B	INSTRUCTIONS MANUAL	(EB/EN)
A1	RQT1323-D	INSTRUCTIONS MANUAL	(EG)
A2	RFKSACH55GCK	INSTRUCTIONS MANUAL	(GC)
A3	WQAN013	WARRANTY CARD	(E/EB/EG)
A3	RQX7433ZA	WARRANTY CARD	(GN)
A4	RQC00168	SERVICE CENTER LIST	
A5	SPB1163T	AM LOOP ANTENNA	
A5-1	SMA233-1M	HOLDER	
A5-2	XTN3+10AFZ	SCREW	
A6	RJA0019-K	AC POWER SUPPLY CORD	△(E/EG)
A6	SJA193	AC POWER SUPPLY CORD	△(EN)
A6	RJA0004	AC POWER SUPPLY CORD	△(GC)
A6	SJA173	AC POWER SUPPLY CORD	△(GN)
A7	SSA270M	FM INDOOR ANTENNA	(E/EB/EG)
A7	SSA272M	FM INDOOR ANTENNA	(GC/GN)
A8	SJP9009	ATTACHMENT FLUG	△(LB)
A9	SJP9215	AC PLUG ADAPTOR	△(GC)



■ PACKAGING

