

Service Manual

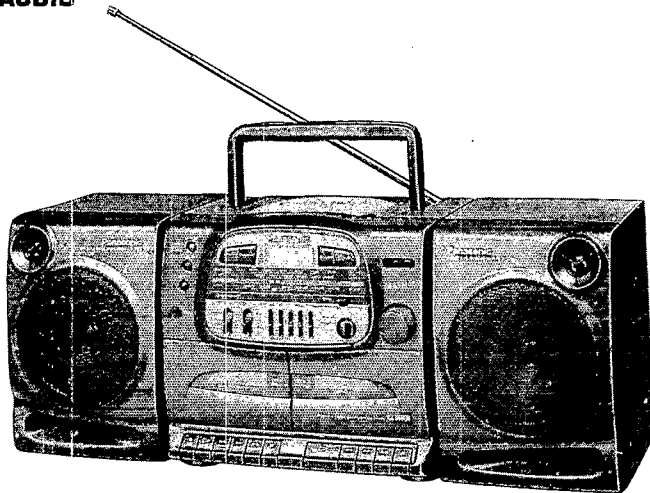
Portable Stereo Component System

Radio Cassette

RX-DT600

COMPACT
disc
DIGITAL AUDIO

MASH*
multi-stage noise shaping



Colour

(K) . . . Black Type

Area

Suffix for Model No.	Area	Colour
(E)	Europe	(K)
(EB)	Great Britain	
(EG)	Germany and Italy	

*

MASH is a trademark of NTT.

TAPE DECK : SG-20W MECHANISM SERIES
TRAVERSE DECK : RAE0113Z MECHANISM SERIES

■ SPECIFICATIONS

■ Radio

Frequency range	
FM	87.5 – 108 MHz
LW	148.5 – 285 kHz
MW	520 – 1610 kHz
Intermediate frequency	
FM	10.7 MHz
AM	459 kHz
Sensitivity	
FM	15 dB/50 mW (–3 dB limit sens.)
LW	50 dB/m/50mW
MW	52 dB/m/50mW

■ CD Player

Sampling frequency	44.1 kHz
Decoding	16 bit linear
Beam source	Semiconductor laser
Pickup	
Wavelength	780 nm
Laser power	No hazardous radiation is emitted (with safety protection)
No. of channels	2 channel, stereo
Frequency response	20 Hz – 20 kHz (+0, –2 dB)
S/N	95 dB
Dynamic range	86 dB
Wow and flutter	Less than possible measurement data
D/A converter	MASH (1 bit DAC)

■ Tape Recorder

Track system	4 track, 2 channel, stereo
Recording system	AC bias
Erasing system	Magnet
Monitor system	Variable sound monitor
Frequency range	
Normal	30 – 14,000 Hz

■ General

Power requirement	
AC	230 – 240 V, 50 Hz Power consumption: 35W
Battery	12V (Eight R20/LR20, UM–1 batteries)
Speakers	2 Woofer; 12 cm 2 Tweeter; 1.5 cm
Jacks	
Input	MIC: 5 mV/(200–600Ω)
Output	Speaker; 2.7 ~ 8 Ω Headphones; 32 Ω
Dimensions (W x H x D)	611 x 247 x 237 mm Main unit; 279 x 247 x 237 mm Speaker box; 170 x 239 x 200 mm
Weight	6.2 kg without batteries

Note :

Specifications are subject to change without notice
Weight and dimensions are approximate.

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 pickup 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 : 780nm

Maximale strahlungsleistung der lasereinheit : 100 μ W/VDE

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

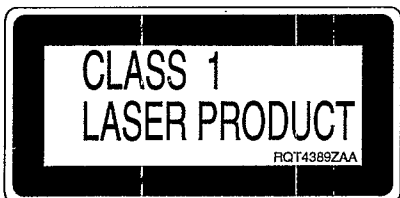
1. Die lasereinheit nicht zerlegen, da die strahlung an der freigelegten laserdioden gefährlich ist.
2. Den werksseitig justierten einstellregler der lasereinheit nicht verstellen.
3. Nicht mit optischen instrumenten in die fokussierlinse blicken.
4. Nicht über längere zeit in die fokussierlinse blicken.

USE OF CAUTION LABELS

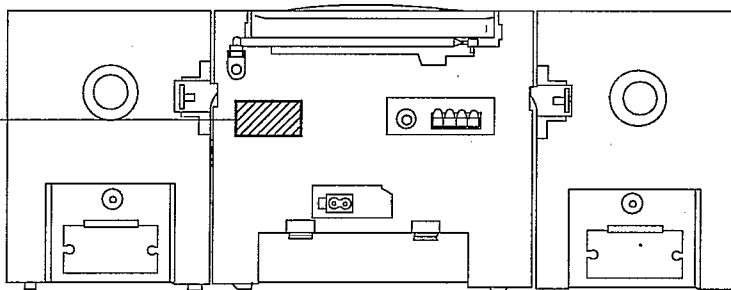
Note : O mark indicate that caution label is used in that area.
 X mark indicate that caution label is not used in that area.

Area	RQT4389ZAA	RQLS0078	RQLS0025
(E)	O	O	O
(EB)	O	X	O
(EG)	O	X	O

RQT4389ZAA



**LUOKAN 1 LASERLAITE
 KLASS 1 LASER APPARAT**

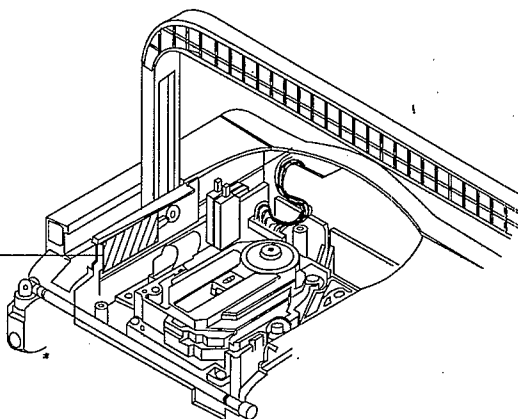


RQLS0078
 (for E area only)

VARO! Avattaessa ja suojalukitus ohiteltaessa olet alttiina näkymätön lasersäteilylle. Älä katso säteeseen.

VARNING! Osynlig laserstråling når denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.

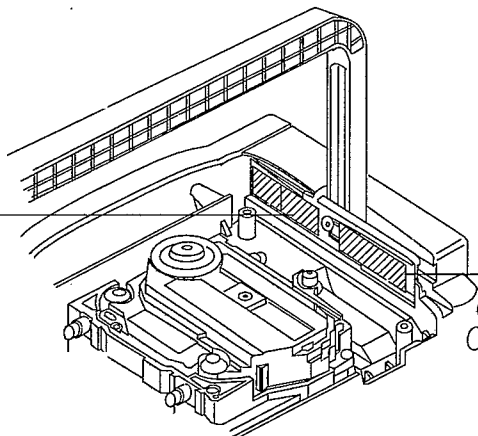
ADVERSE! Usynlig laserstråling når deksel åpnes og sikkerhetslås brytes. Unngå eksponering for strålen.
RQLS0078



RQLS0025

VORSICHT- Unsichtbare Laserstrahlung, wenn Abdeckung geöffnet und Sicherheitsverriegelung überbrückt. Nicht dem Strahl aussetzen.

DANGER- invisible laser radiation when open and interlock defeated.
AVOID DIRECT EXPOSURE TO BEAM.
RQLS0025



RQLS0025

ADVARSEL: USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.

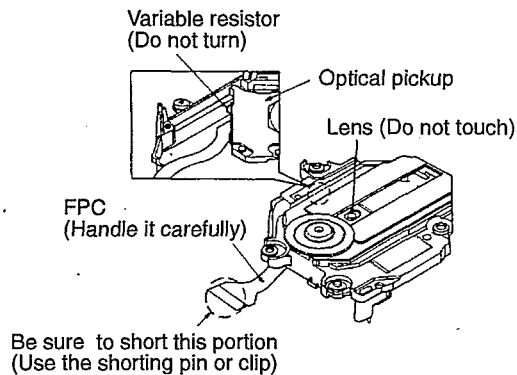
■ HANDLING PRECAUTIONS FOR TRAVERSE DECK

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 antistatic 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.

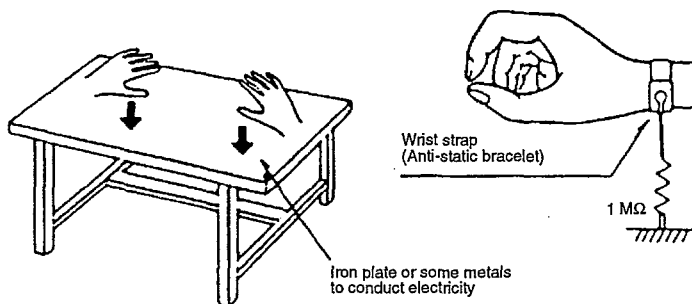
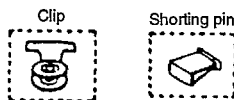


• Grounding for electrostatic breakdown prevention

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).



■ CAUTION FOR AC MAINS LEAD

[For [EB] area.]

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover, the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OFF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted, please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this lead are coloured in accordance with the following code:

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

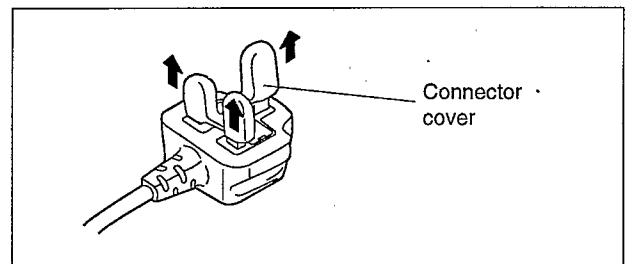
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either or these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth symbol \perp .

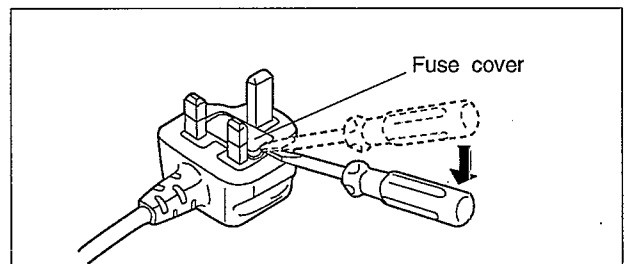
Before use

Remove the connector cover as follows.

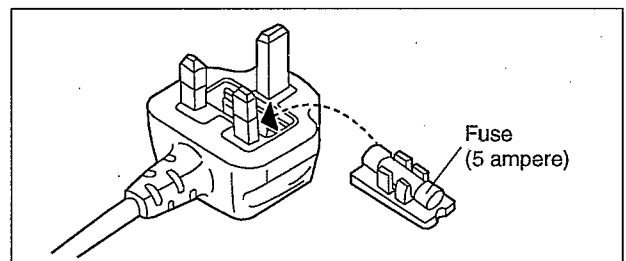


How to replace the fuse

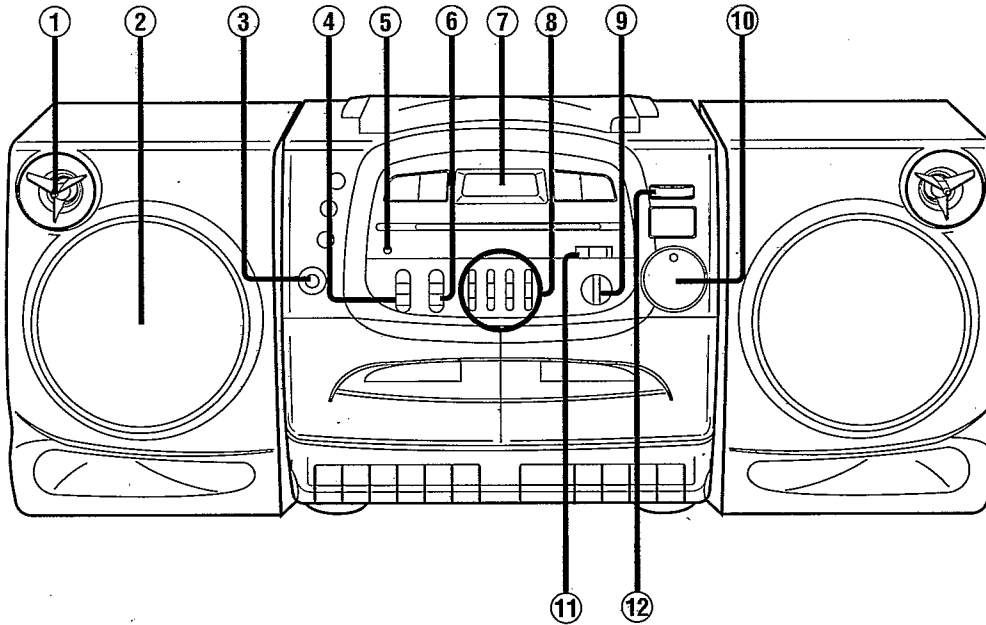
1. Remove the fuse cover with a screwdriver.



2. Replace the fuse and attach the fuse cover.



■ LOCATION OF CONTROLS

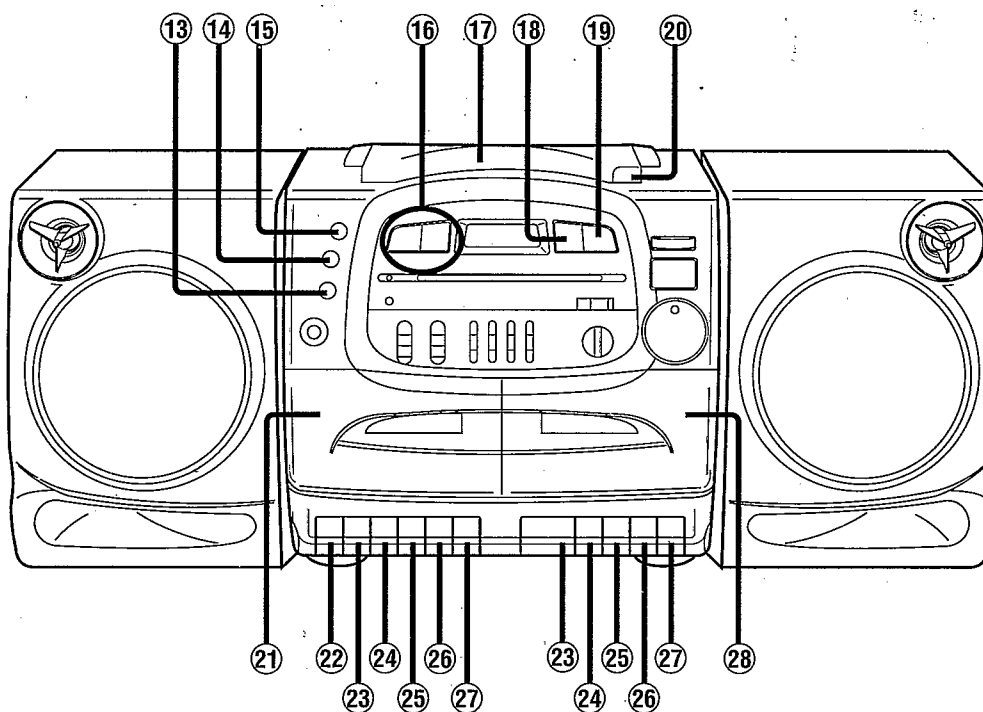


Basic controls

No.	Name
①	Speakers (Tweeter)
②	Speakers (Woofer)
③	Headphones jack (PHONES)
④	Function selector/power switch (SELECTOR)
⑤	Operation/battery check indicator (OPERATION/BATT)
⑥	Edit recording speed/beat proof selector (EDITING/B.P)
⑦	Display section
⑧	Graphic equalizer control (GRAPHIC EQUALIZER)
⑨	Extra bass system controls (XBS LEVEL)
⑩	Volume control (VOLUME)

Tuner controls

No.	Name
⑪	Band selector (BAND)
⑫	Tuning control (TUNING)

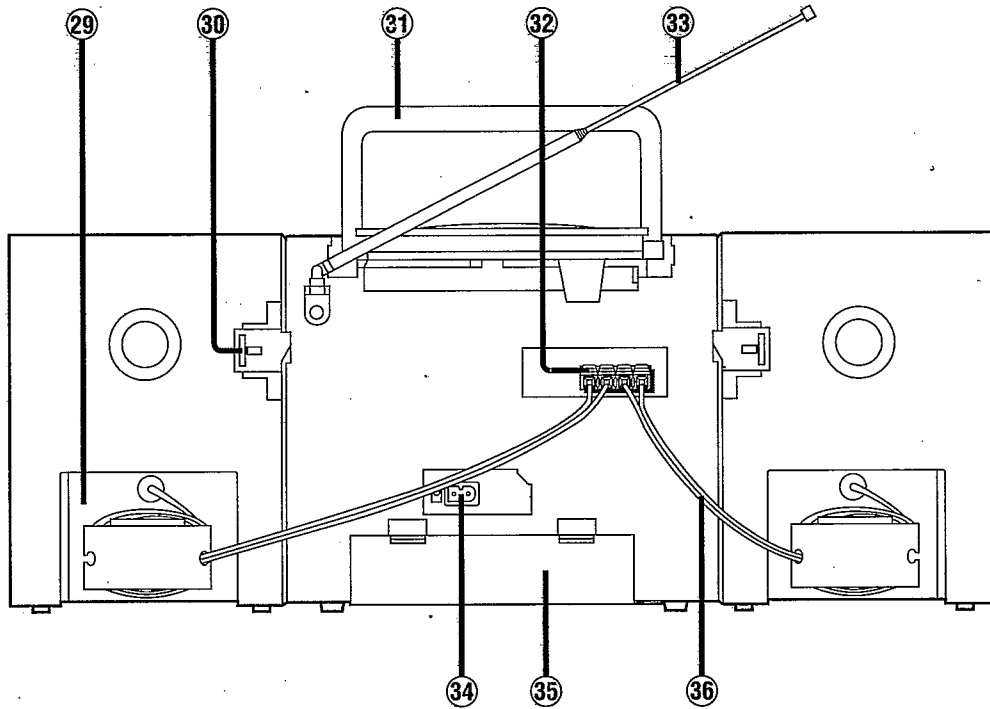


CD controls

<i>No.</i>	<i>Name</i>
⑬	Repeat button (REPEAT)
⑭	Easy CD record button (EASY CD RECORD)
⑮	Memory button (MEMORY)
⑯	Skip/search buttons (I◀◀/◀◀, ▶▶/▶▶I)
⑰	Disc lid
⑱	Stop/clear button (■/CLEAR)
⑲	Play/pause button (▷/)
⑳	CD eject button (▲ CD EJECT)

Cassette deck controls

<i>No.</i>	<i>Name</i>
⑳	Deck 1 cassette holder (DECK 1)
㉑	Record button (● REC)
㉒	Playback button (▷ PLAY)
㉓	Rewind/review button (◀◀ REW/REV)
㉔	Fast forward/cue button (▶▶ FF/CUE)
㉕	Stop/eject button (■/▲ STOP/EJECT)
㉖	Pause button (PAUSE)
㉗	Deck 2 cassette holder (DECK 2)



Rear panel section

<i>No.</i>	<i>Name</i>
②⑨	Speaker cable compartments
③⑩	Speaker release levers
③①	Handle
③②	Speaker terminals (SPEAKER)

<i>No.</i>	<i>Name</i>
③③	Telescopic antenna
③④	AC socket (AC IN~)
③⑤	Battery compartment cover
③⑥	Speaker cables

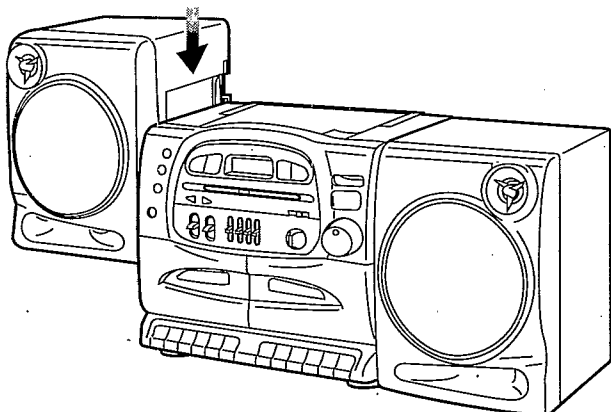
■ SPEAKER SYSTEM CONNECTION

This unit can be used as a one-piece portable stereo radio cassette recorder, or a three-piece component system, by attaching or detaching the speaker system.

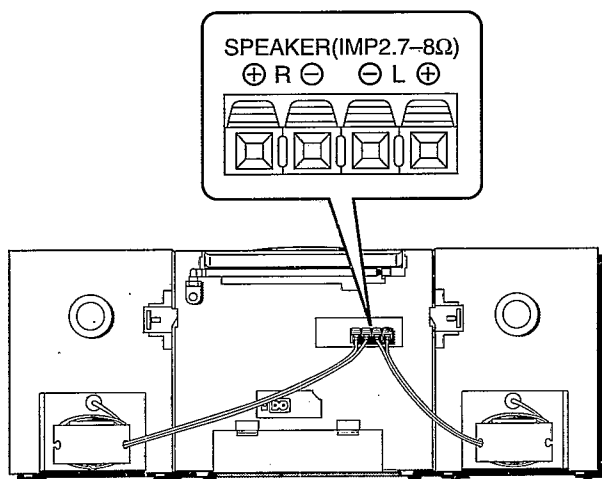
Before attaching or detaching the speakers, be sure to disconnect the speaker cables from the speaker terminals. Be sure to set SELECTOR to TAPE/**OFF** to turn off the unit before connecting/disconnecting the speaker cables.

Attaching the speakers

Align the speaker with the main unit as shown in the figure, interlock the grooves and press down.



Connect the speaker cable (black) to the \ominus (negative) speaker terminal, and the other speaker cable (red) to the \oplus (positive) speaker terminal.



When using the unit with the speakers attached, wind the speaker cables as shown.

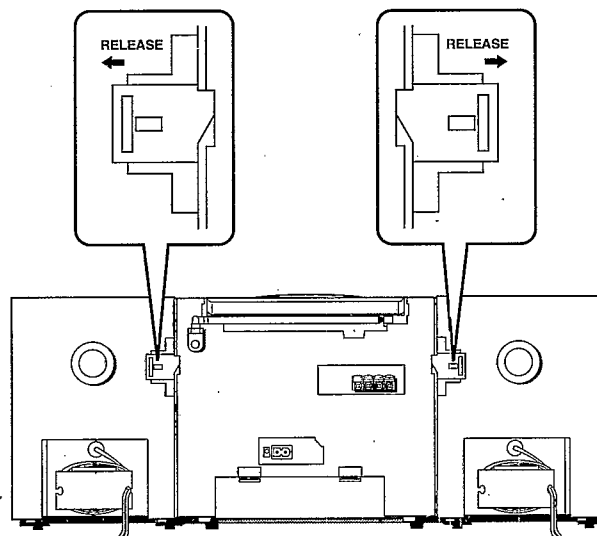
Note

Since a strong magnet is used for the speaker, keep magnetized commuter passes, tickets or personal credit cards, recorded tapes, watches, etc. away from the set. The speaker magnet in the set may damage them.

Detaching the speakers

Unlock the speaker release levers by pulling them in the direction shown below, and slide each speaker up.

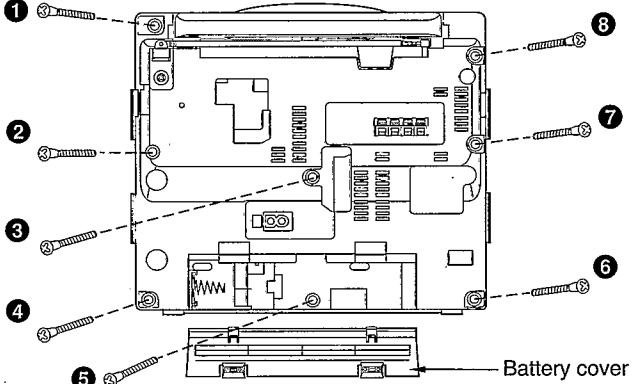
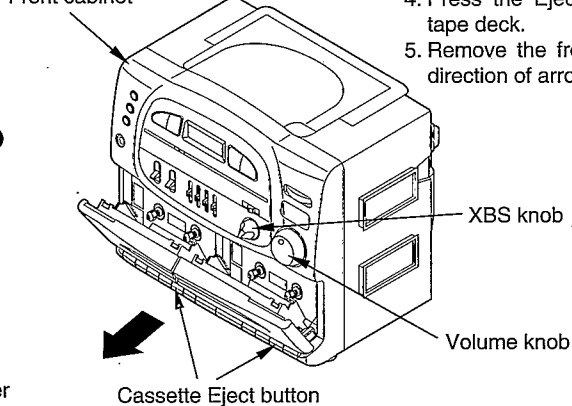
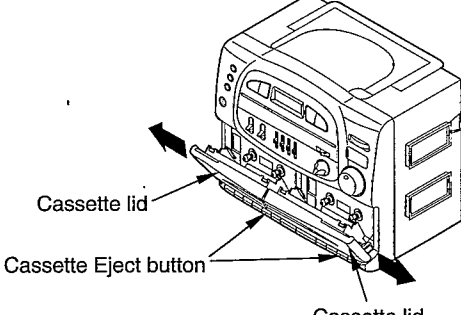
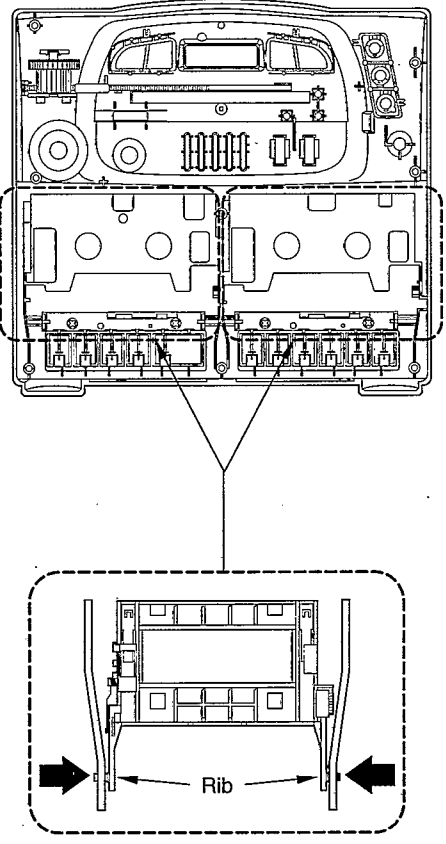
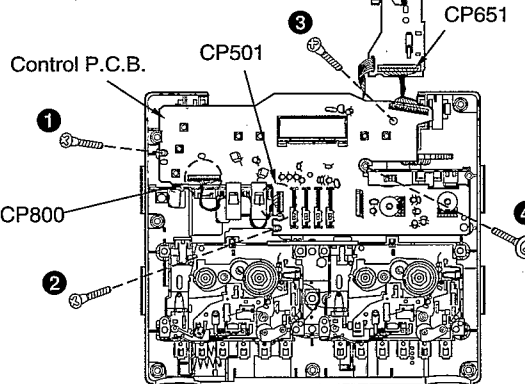
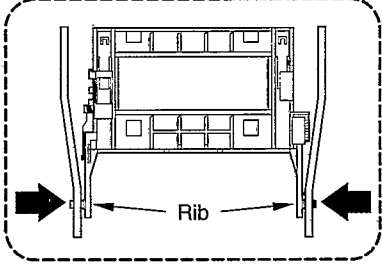
Connect the speaker cables to the speaker terminals.

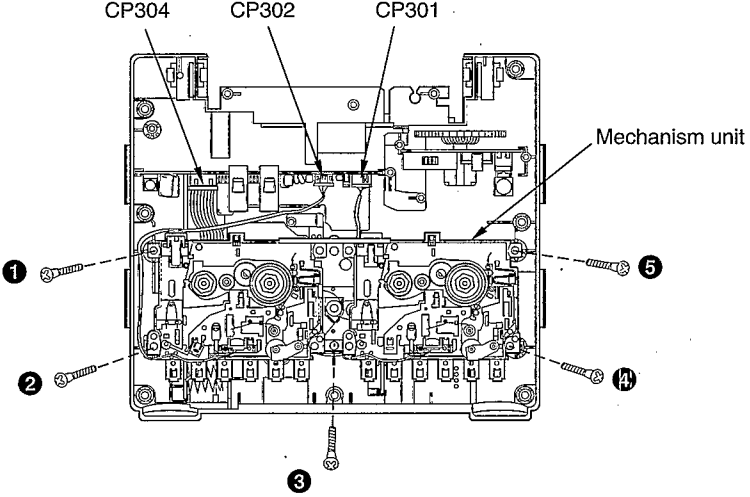
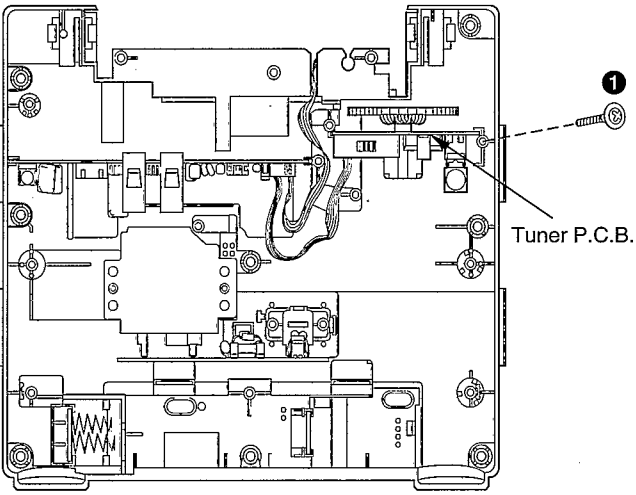
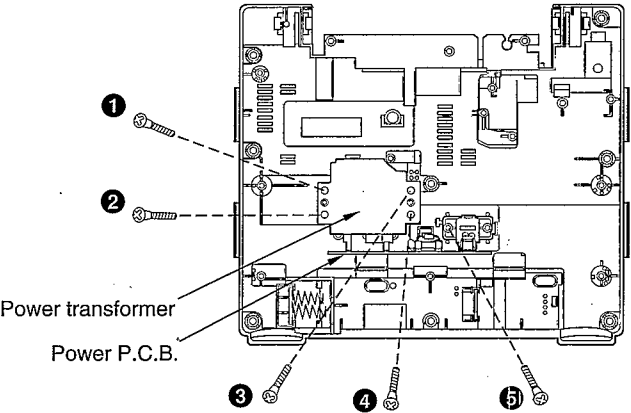


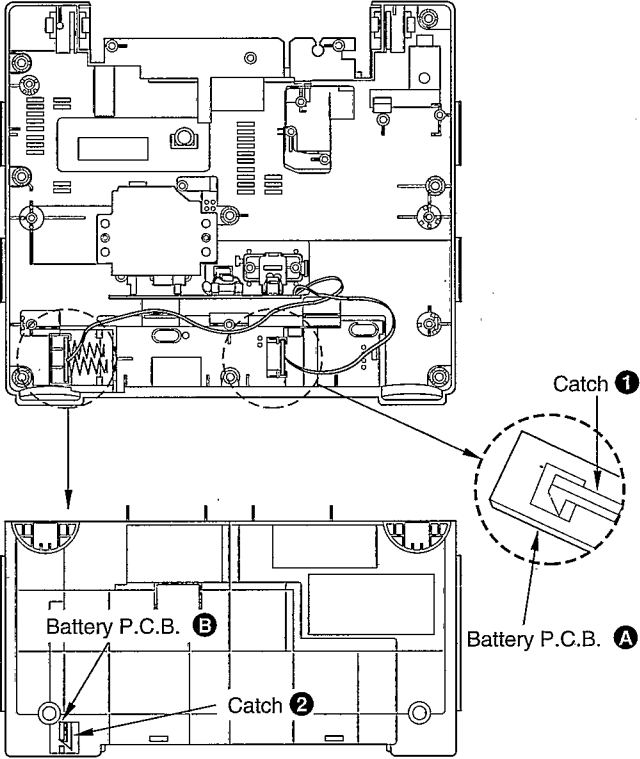
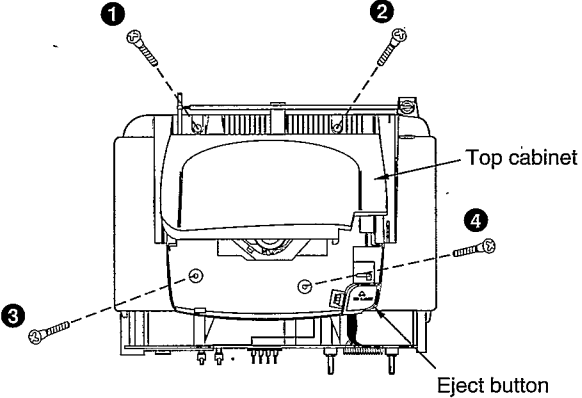
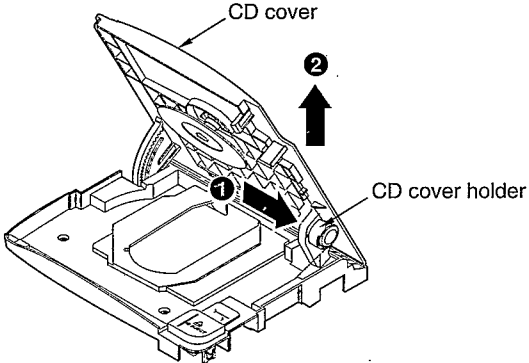
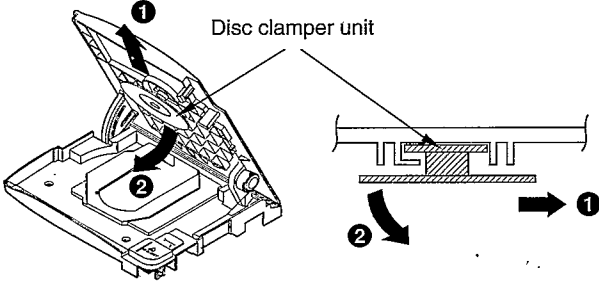
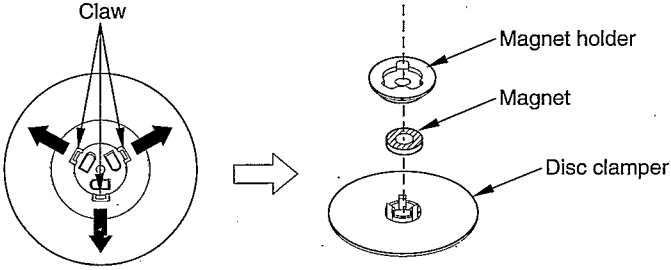
DISASSEMBLY INSTRUCTIONS

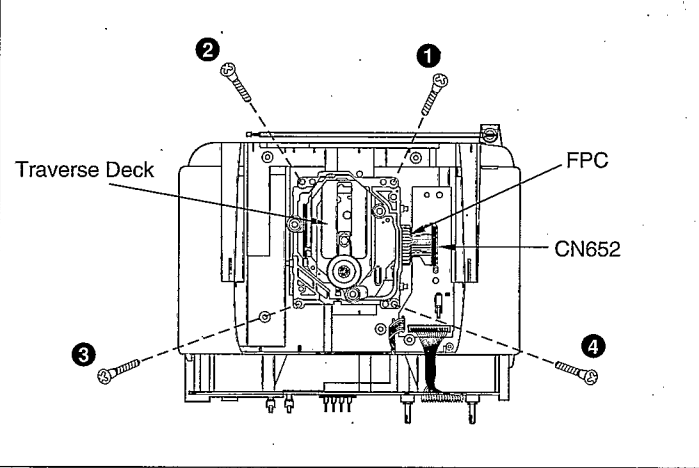
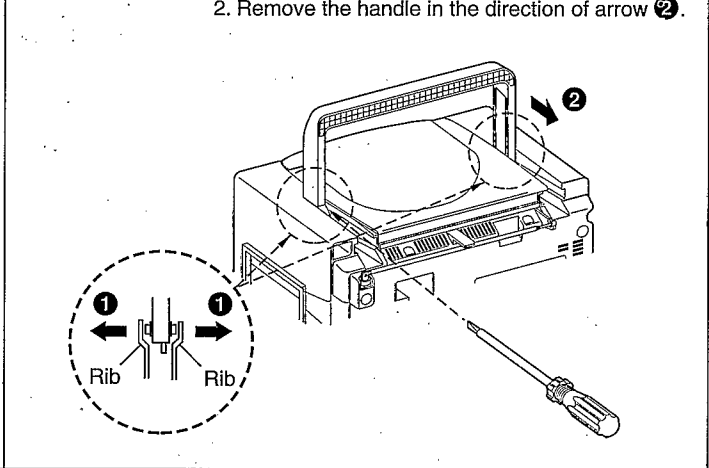
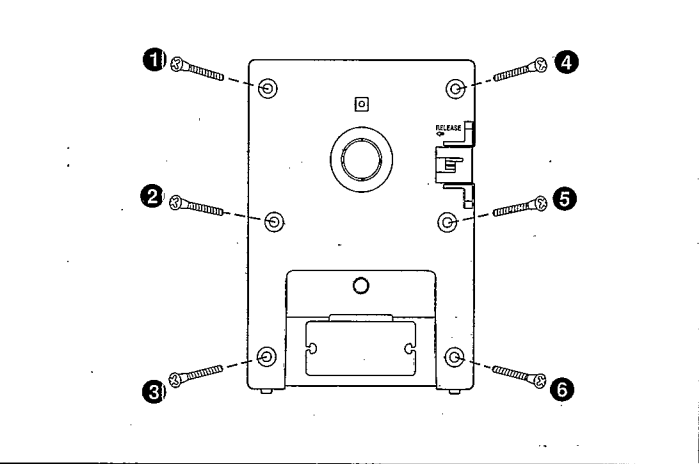
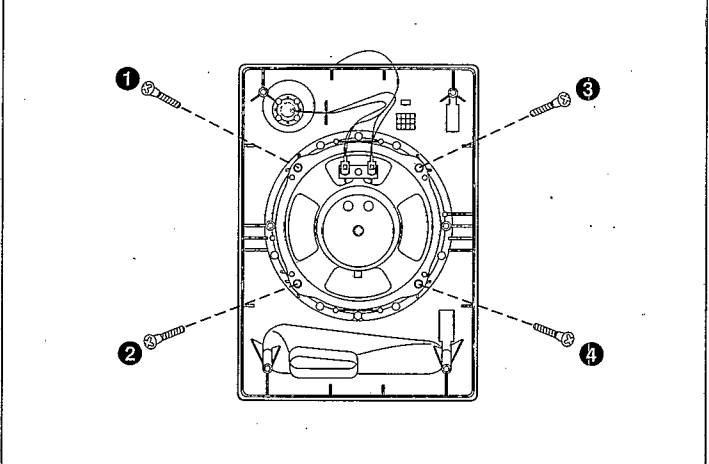
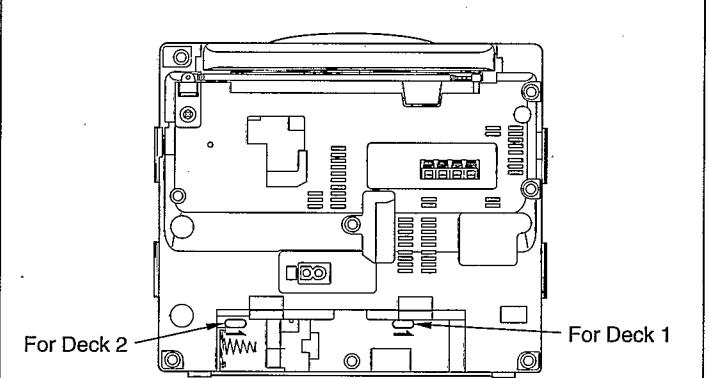
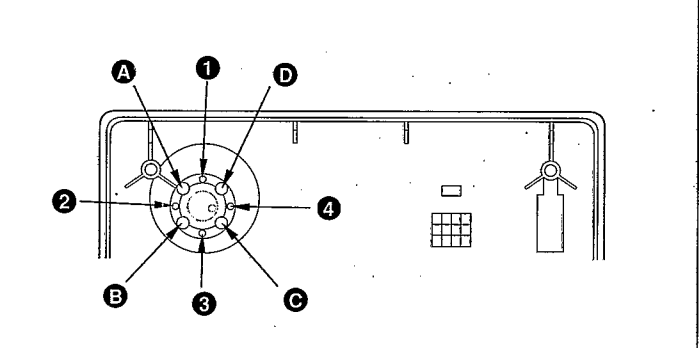
Warning: This product uses a laser diode. Refer to caution statements on page 2.

- ACHTUNG:**
- Die lasereinheit nicht zerlegen.
 - Die lasereinheit darf nur gegen eine vom hersteller spezifizierte einheit ausgetauscht werden.

<p>Ref. No. 1</p>	<p>Removal of the Front Cabinet</p>	
<p>Procedure 1</p>	<p>1. Remove the battery cover. 2. Remove the 8 screws (1 ~ 8).</p>	<p>3. Pull out the XBS knob and the volume knob. 4. Press the Eject button on each tape deck. 5. Remove the front cabinet in the direction of arrow.</p>
		
<p>Ref. No. 2</p>	<p>Removal of the Cassette Lid</p>	<p>Ref. No. 3</p>
<p>Procedure 2</p>	<p>1. Press the Eject button. 2. Remove the cassette lid in direction of arrow.</p>	<p>Procedure 1 → 3</p>
		
<p>Ref. No. 4</p>	<p>Removal of the Control P.C.B.</p>	
<p>Procedure 1 → 4</p>	<p>1. Remove 4 screws (1 ~ 4). 2. Release 3 connectors (CP501, CP651 & CP800). 3. Remove the control P.C.B.</p>	
		

<p>Ref. No. 5</p>	<p>Removal of the Mechanism Unit</p>	
<p>Procedure 1 → 4 → 5</p>	<p>1. Remove 5 screws (1 ~ 5). 2. Release 3 connectors (CP301, CP302 & CP304). 3. Remove the mechanism unit.</p>	
		
<p>Ref. No. 6</p>	<p>Removal of the Tuner P.C.B.</p>	<p>Ref. No. 7</p> <p>Removal of the Main P.C.B.</p>
<p>Procedure 1 → 4 → 5 → 6</p>	<p>1. Remove 1 screw (1). 2. Pull out the tuner P.C.B.</p>	
		
<p>Ref. No. 8</p> <p>Removal of the Power P.C.B.</p>		
<p>Procedure 1 → 4 → 5 → 8</p>	<p>1. Remove 5 screws (1 ~ 5). 2. Pull out the power P.C.B.</p>	
 <p>Caution for Assembly: Turn Varicon gear fully anti-clockwise to set "0" point before fixing tuner P.C.B.</p>		

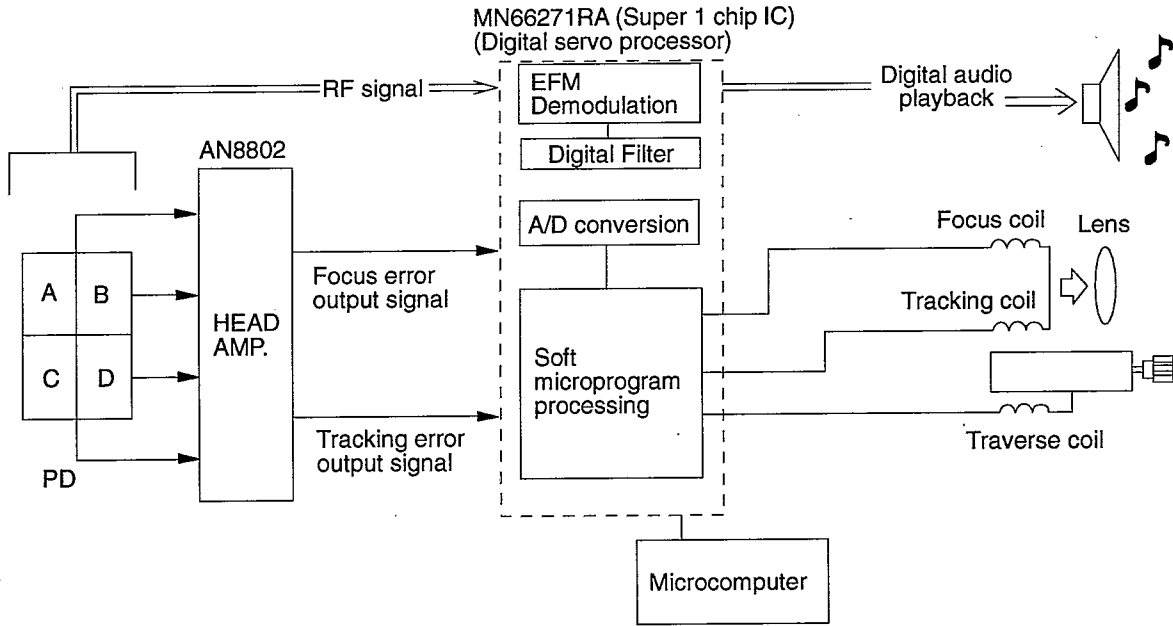
<p>Ref. No. 9</p>	<p>Removal of the Battery P.C.B.</p>	<p>Ref. No. 10</p>	<p>Removal of the Top Cabinet</p>
<p>Procedure 1 → 4 → 5 → 8 → 9</p>  <p>BATTERY P.C.B. A</p> <ol style="list-style-type: none"> 1. Release the catch 1. 2. Pull out the battery P.C.B. A. <p>BATTERY P.C.B. B</p> <ol style="list-style-type: none"> 1. Release catch 2 on the side of bottom rear cabinet. 2. Pull out the battery P.C.B. B. <p>Bottom view of rear cabinet</p>	<p>Procedure 1 → 10</p> <ol style="list-style-type: none"> 1. Press the CD Eject button. 2. Remove 4 screws (1 ~ 4). 3. Remove the top cabinet. 	<p>Ref. No. 11</p>	<p>Removal of the CD Cover</p> <p>Procedure 1 → 10 → 11</p> <ol style="list-style-type: none"> 1. Push the CD cover holder in direction of arrow 1. 2. Shift up the CD cover in direction of arrow 2. 3. Remove the CD cover. 
<p>Ref. No. 12</p>	<p>Removal of the Disc Clamper Unit</p>	<p>Removal of the Magnet</p>	
<p>Procedure 1 → 10 → 11 → 12</p> 	<ol style="list-style-type: none"> 1. Press the CD Eject button and open the CD cover. 2. Slide disc clamper in the direction of the arrow 1 and then remove the disc clamper unit in the direction of arrow 2. 		

<p>Ref. No. 13</p>	<p>Removal of the Traverse Deck</p>	<p>Ref. No. 14</p>	<p>Removal of the Handle</p>
<p>Procedure 1→10→13</p>	<p>1. Remove 4 screws (1 ~ 4). 2. Remove FPC cable from connector CN652.</p>	<p>Procedure 14</p>	<p>1. Use a flat-tip screwdriver to release the 2 ribs on both sides in the direction of arrow 1. 2. Remove the handle in the direction of arrow 2.</p>
			
<p>Ref. No. 15</p>	<p>Removal of the Speaker Front Cabinet</p>	<p>Ref. No. 16</p>	<p>Removal of the Woofer</p>
<p>Procedure 15</p>	<p>1. Remove 6 screws (1 ~ 6).</p>	<p>Procedure 15→16</p>	<p>1. Remove 4 screws (1 ~ 4).</p>
			
<p>Ref. No. 17</p>	<p>Removal of the Tweeter</p>		<p>■ WHAT TO DO WHEN THE TAPE IS ENTANGLED</p>
<p>Procedure 15→16→17</p>	<p>1. Cut the 4 melted ribs with knife (A ~ D). 2. Remove the tweeter.</p>		
 <p>Install the Tweeter 1. Replace the tweeter. 2. Use solder gun to melt the ribs (1 ~ 4).</p>		<p>When a tape is caught in the pinch roller, etc., release the tape by turning the pulley on the motor with a screw-driver in the direction of arrow.</p>	

DIGITAL SERVO SYSTEM

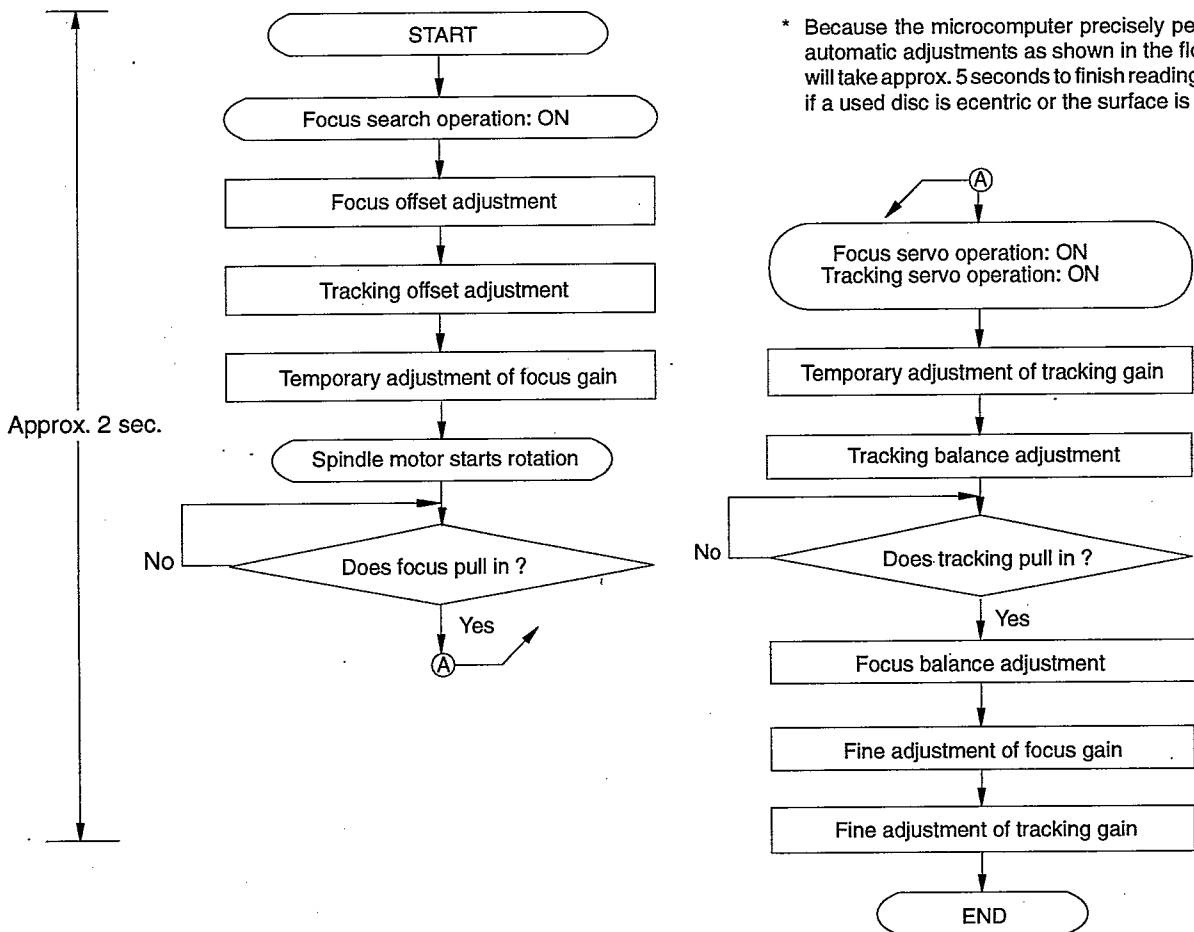
DIGITAL SERVO SYSTEM

This servo system has no adjustment VRs.



The following flow chart shows the sequence of automatic adjustments.

• Flow chart on automatic adjustment sequence



SCHEMATIC DIAGRAM

1 2 3 4 5 6 7 8 9

A

B

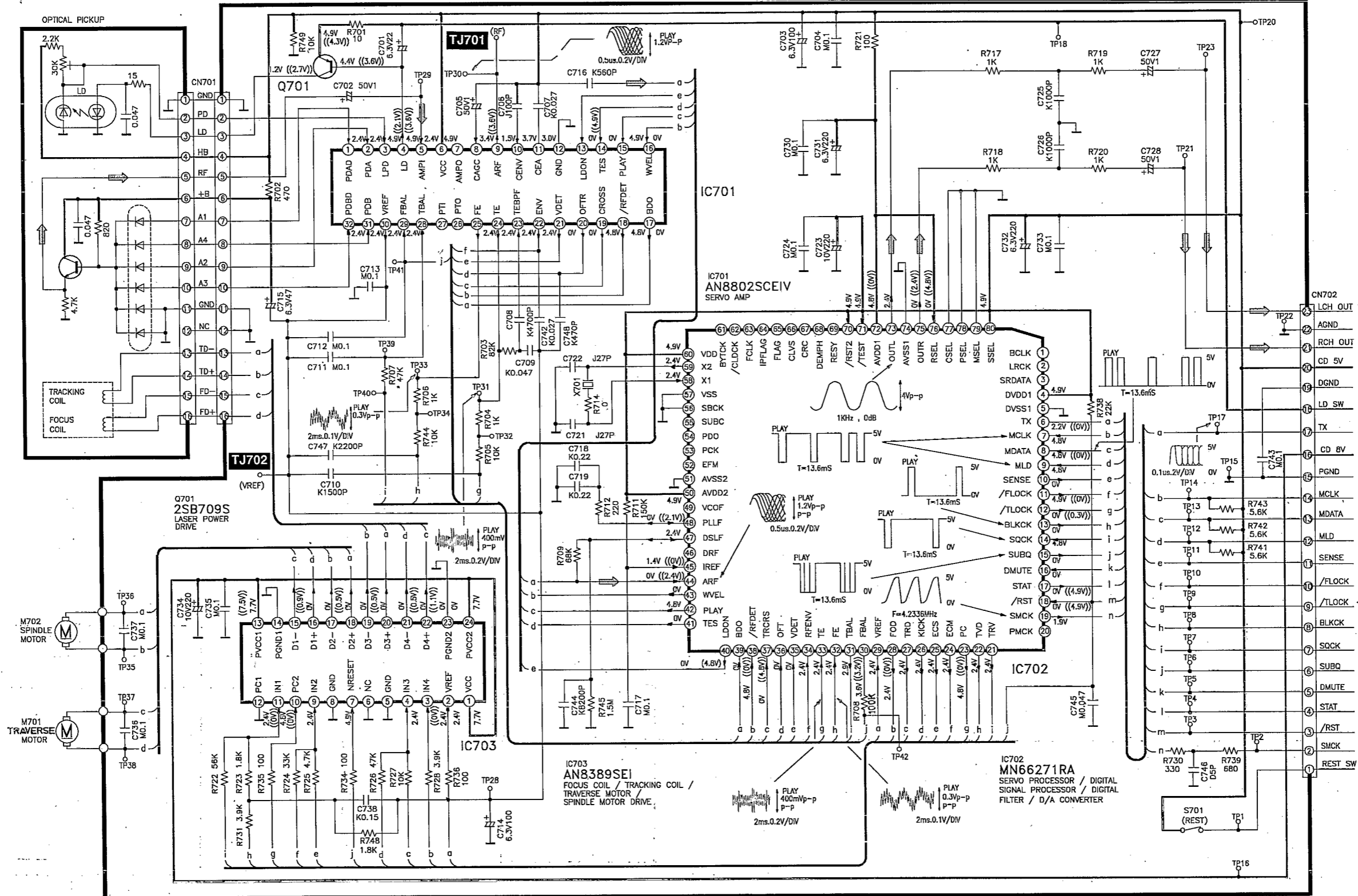
C

D

F

T

A SERVO CIRCUIT



TO G CONNECTOR CIRCUIT (CN652) (Page 18)

NOTES:**< For CONTROL CIRCUIT >**

- SW801 : Memory Switch. (MEMORY)
- SW802 : Easy CD Record Switch. (EASY CD RECORD)
- SW803 : Repeat Switch. (REPEAT)
- SW804 : CD Reverse Skip/Search Switch. (◀◀/◀◀)
- SW805 : CD Forward Skip/Search Switch. (▶▶/▶▶)
- SW806 : CD Stop/Clear Switch. (■ /CLEAR)
- SW807 : CD Play/Pause Switch. (▶ /||)

- VR501-1 ~ VR501-2 : GEQ(330Hz) VR.
- VR502-1 ~ VR502-2 : GEQ(1kHz) VR.
- VR503-1 ~ VR503-2 : GEQ(3.3kHz) VR.
- VR504-1 ~ VR504-2 : GEQ(10kHz) VR.
- VR506-1 ~ VR506-2 : XBS VR.
- VR507-1 ~ VR507-2 : Volume VR.

< For SERVO CIRCUIT >


- S701 : Rest Switch.

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

No mark... Tape Playback (()) ... CD

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 foil.
 - Ground the soldering iron.
 - Put a conductive mat on the work table.
 - Do not touch the pins of IC or LSI with fingers directly.
- Important safety notice :
Components identified by  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 anytime with the development of new technology.



... CD SIGNAL LINE



... MAIN SIGNAL LINE



... +B LINE

NOTES:

< For MAIN CIRCUIT >

- S301-1 ~ S301-4 : Function Select Switch. (CD...CD, R...RADIO, T...TAPE)
- S302-1 ~ S302-2 : Tape Editing/Beatproof Select Switch. (HI...HIGH, NOR...NORMAL, I... BEATPROOF I, II... BEATPROOF II)

< For MECHANISM CONTROL CIRCUIT >

- S601 : Deck 1 Playback Switch.
- S602 : Deck 2 Playback Switch.
- S603 : Recording Switch.

- VR601 : Tape Speed Adjustment Switch.

< For CONNECTOR CIRCUIT >

- S651 : CD Cover Open/Close Switch.
- S652 : CD Loading Switch.

< For TUNER CIRCUIT >

- SW1-1 ~ SW1-8 : Band Select Switch. (F...FM, L...LW, M...MW)

< For POWER CIRCUIT >

- S901 : AC Power/Battery Select Switch(JK901).

< GENERAL >

- Battery Current consumption:

Vol. min.....	93mA (RADIO)	Vol. max.....	500mA (RADIO)
	155mA (TAPE)		700mA (TAPE)
	310mA (CD)		1320mA (CD)

Measurement condition:

Radio	: FM	60 dB, 30%mod
	AM(MW/LW)	74 dB/m, 30%mod
Tape	: 315 Hz, 0dB	
CD	: 1kHz, 0dB	

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

No mark..	Tape Playback	(())	... CD
< >	... FM	()	... AM(MW/LW)
<< >>	... RECORD		

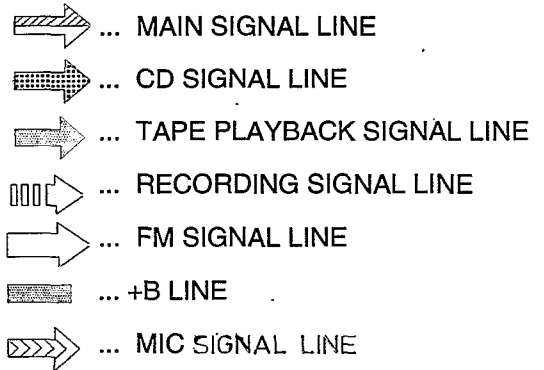
CAUTION !

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 foil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the pins of IC or LSI with fingers directly.

- 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 anytime with the development of new technology.



SCHEMATIC DIAGRAM

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

A

B

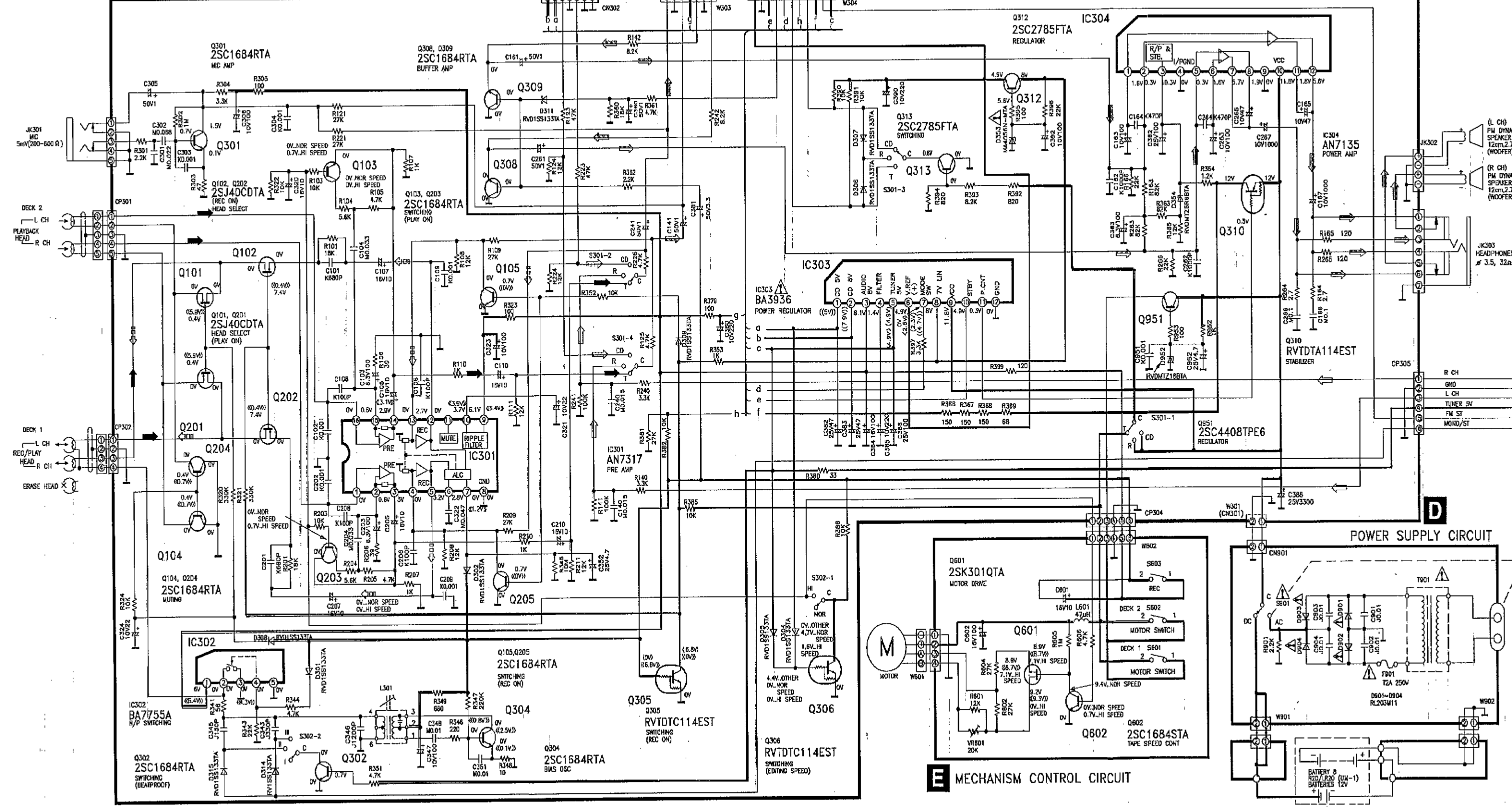
C

D

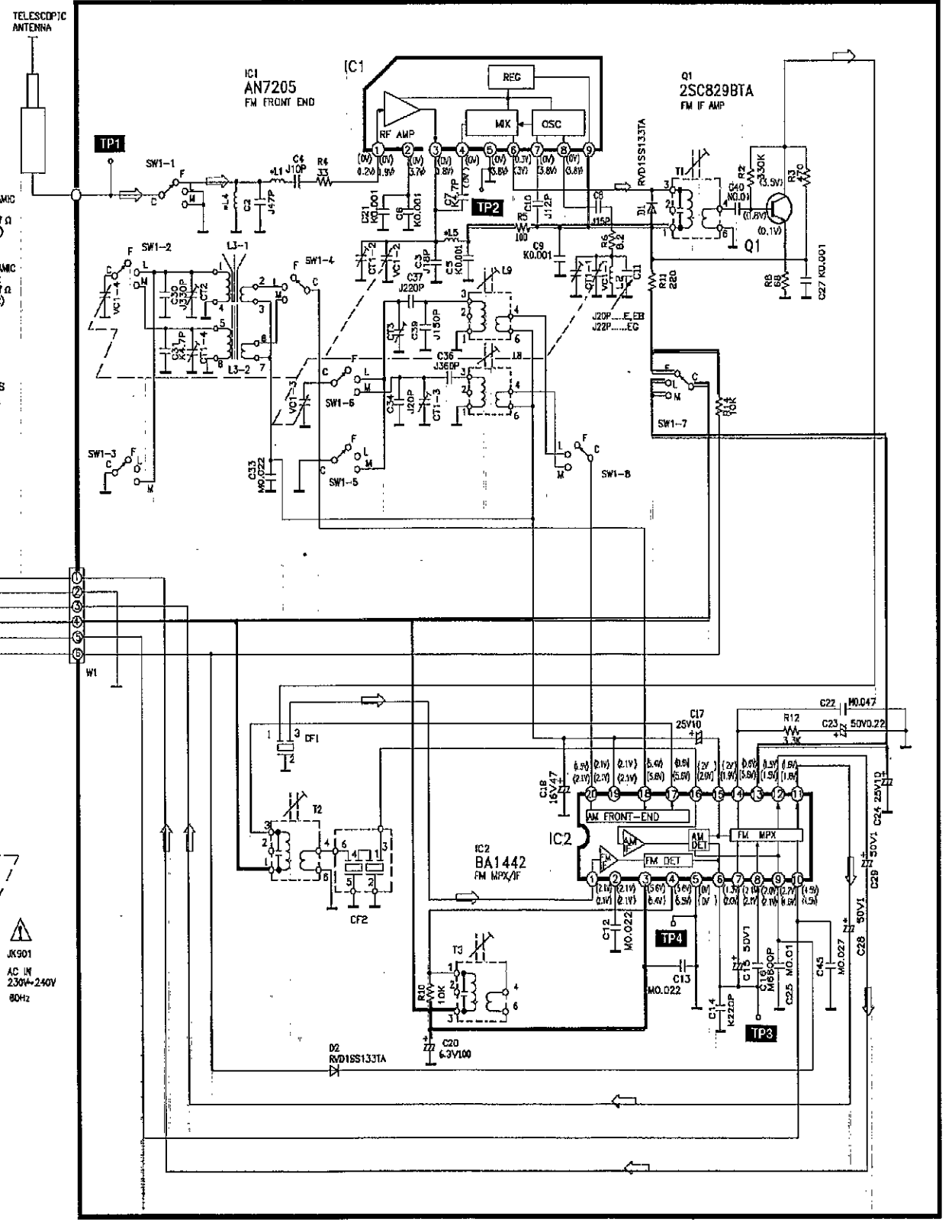
E

F

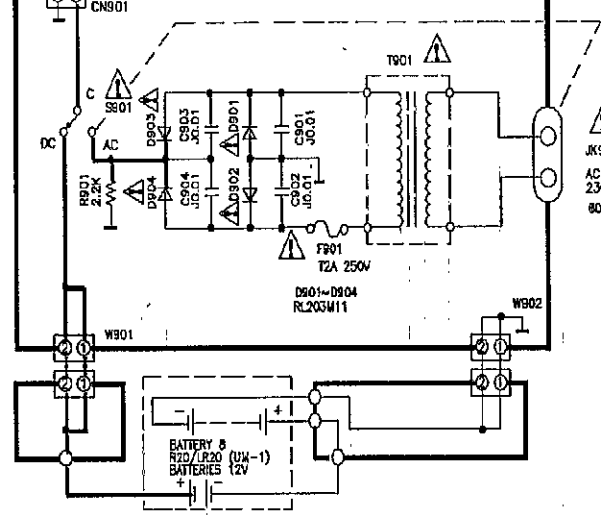
B MAIN CIRCUIT



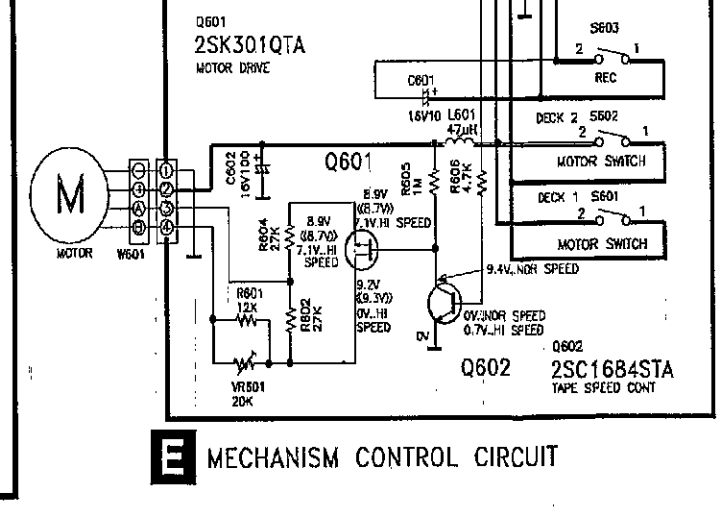
C TUNER CIRCUIT



D POWER SUPPLY CIRCUIT



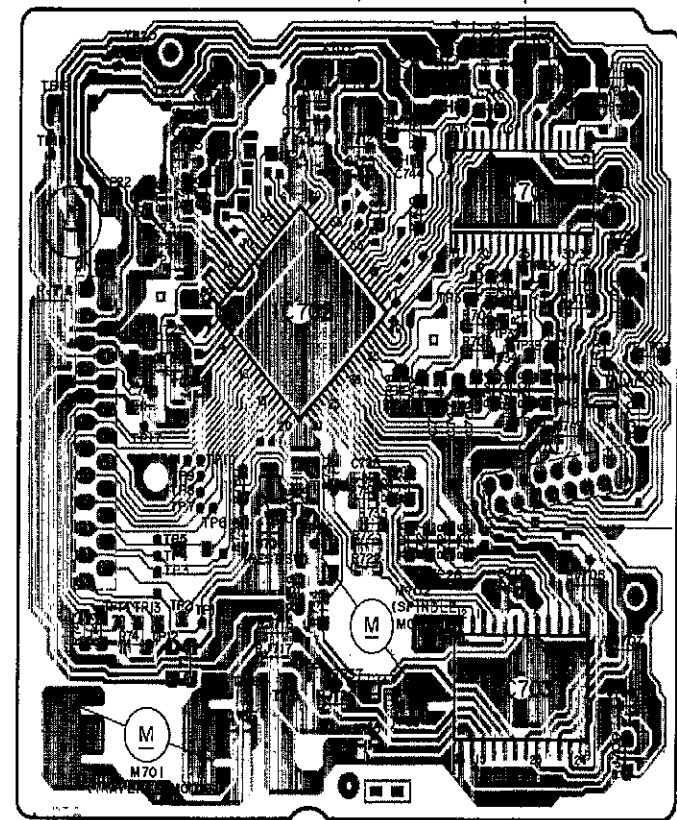
E MECHANISM CONTROL CIRCUIT



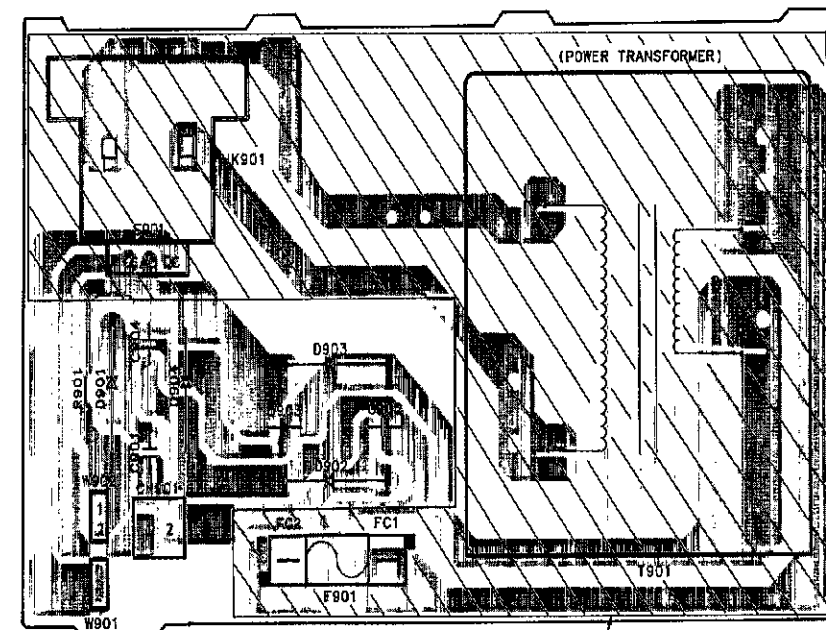
PRINTED CIRCUIT BOARD

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

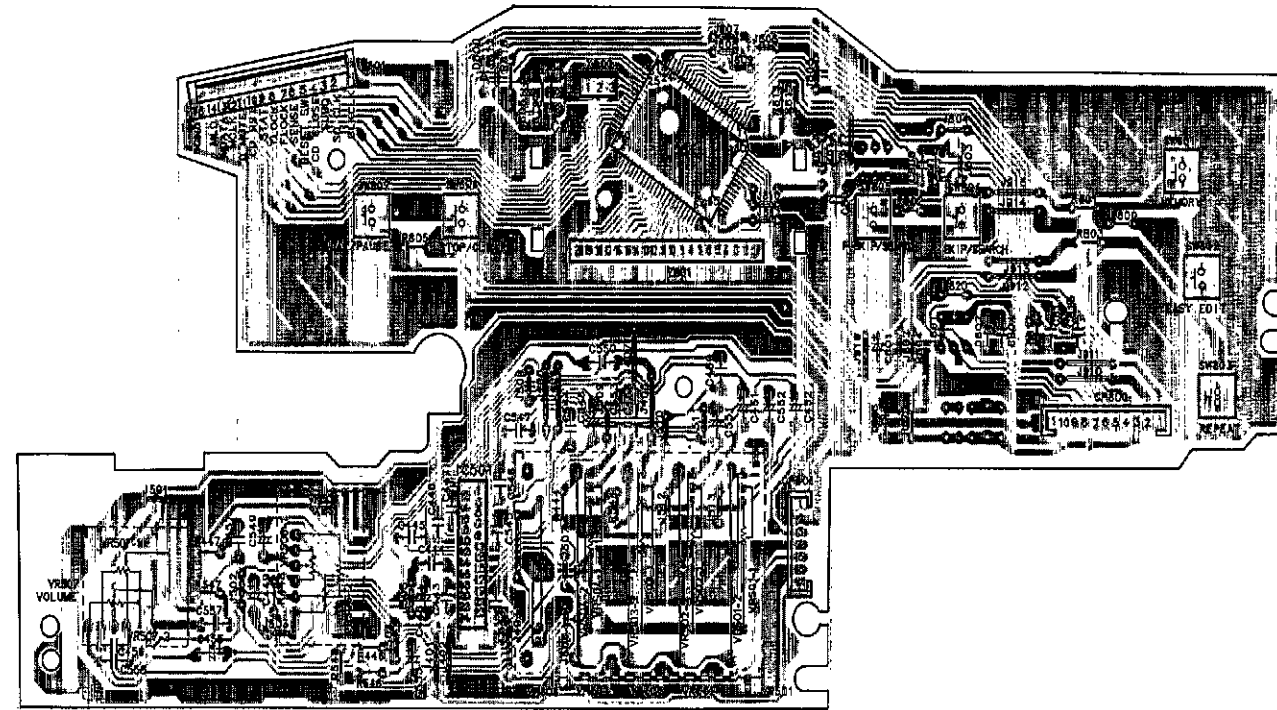
A SERVOP.C.B. (REP1650A-N)



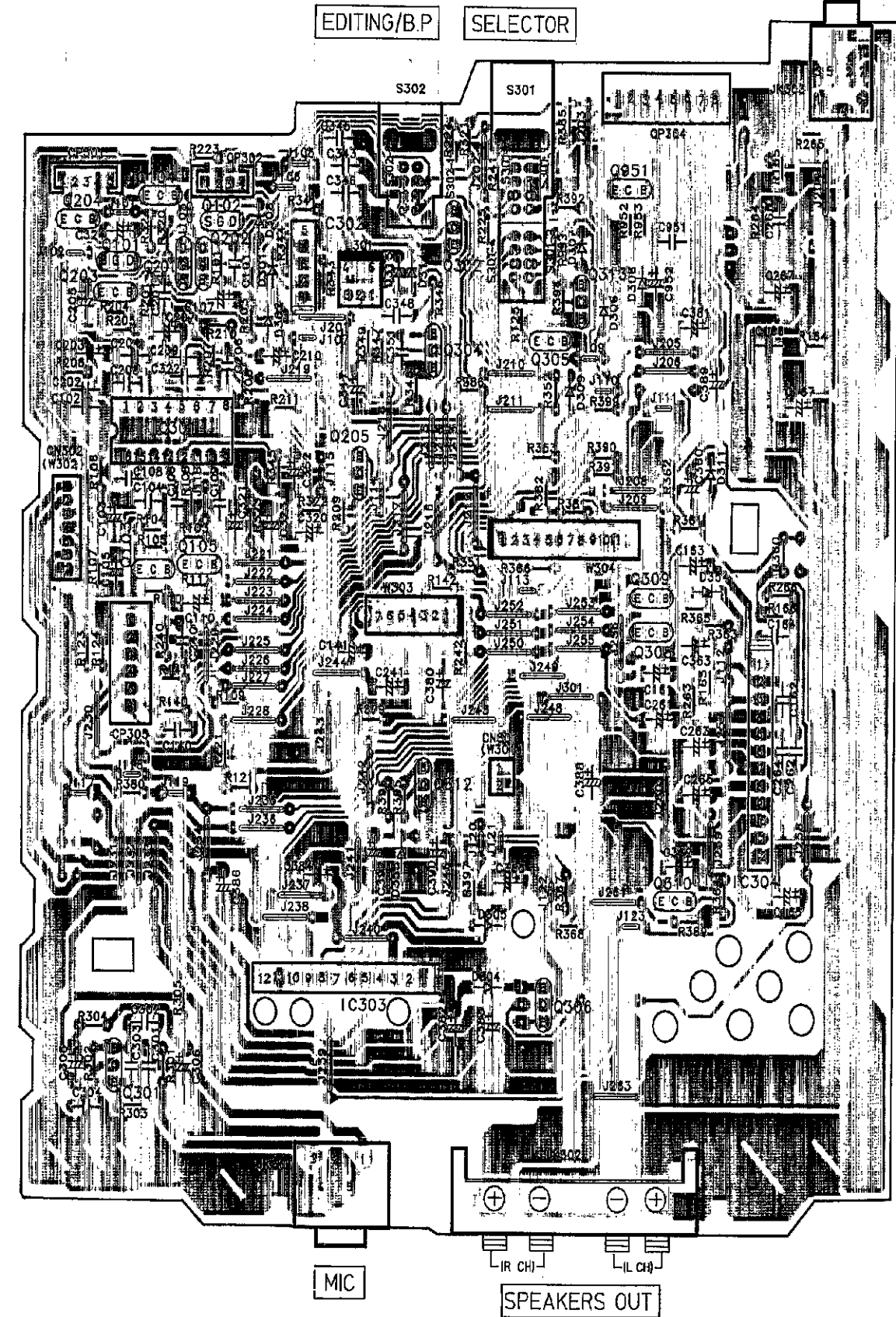
D POWER P.C.B. (REPX0061A)



F CONTROL P.C.B. (REPX0059A)



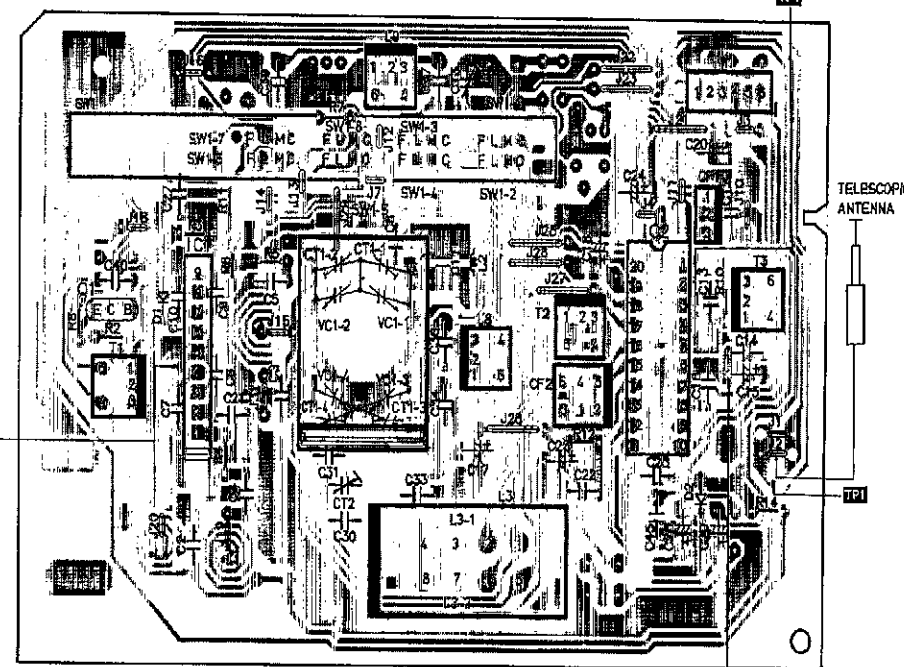
B MAIN P.C.B. (REPX0058A)



A B C D E F

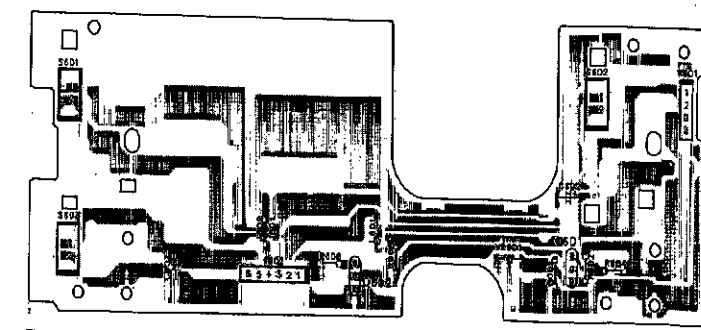
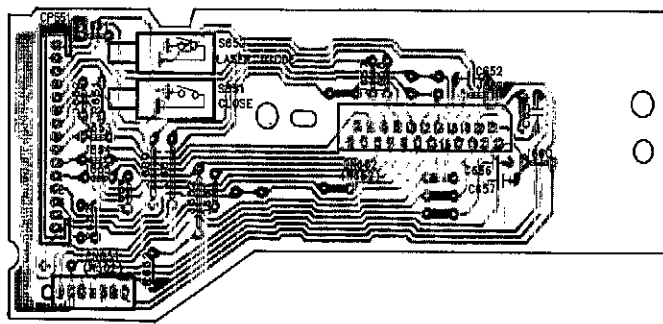
CAUTION RISK OF ELECTRIC SHOCK AC voltage line. Please do not touch this portion.

BATTERY 8 R20/R20 (UM-1) BATTERIES 12V



C TUNER P.C.B. (REPX0060A...E, EB) (REPX0060C...EG)

G CONNECTOR P.C.B. (REPX0058A)



E MECHANISM CONTROL P.C.B. (REPX0062)

■ TERMINAL FUNCTION OF IC'S

• IC702 (MN66271RA)

Pin No.	Mark	I/O	Function
1	BCLK	O	Serial bit clock terminal (Not used, open)
2	LRCK	O	L/R discriminating signal (Not used, open)
3	SRDATA	O	Serial data (Not used, open)
4	DVDD1	I	Power supply (digital circuit) terminal
5	DVSS1	—	GND (digital circuit) terminal
6	TX	O	Digital audio interface signal
7	MCLK	I	Microprocessor command clock signal
8	MDATA	I	Microprocessor command data signal
9	MLD	I	Microprocessor command load signal
10	SENSE	O	Sense signal output (OFT, FESL, MAGEND, NAJEND, POSAD, SFG)
11	/FLOCK	O	Optical servo condition(focus)("L" : lead-in)
12	/TLOCK	O	Optical servo condition(tracking)("L" : lead-in)
13	BLKCK	O	Sub-code block clock (f=75Hz)
14	SQCK	I	External clock signal input for sub-code Q register
15	SUBQ	O	Sub-code Q code output
16	DMUTE	I	Muting input ("H" : mute)
17	STAT	O	Status signal output (CRC, CUE, CLVS, TTSTVP, FCLV, SQCK)
18	/RST	I	Reset input
19	SMCK	O	1/2-divided clock signal of crystal oscillating at MSEL = "H" (fSMCK=8.4672MHz) 1/4-divided clock signal of crystal oscillating at MSEL="L" (fSMCK=4.2336MHz)
20	PMCK	O	1/192-divided clock signal of crystal oscillating (fPMCK=88.2kHz) (Not used, open)
21	TRV	O	Traverse servo control output
22	TVD	O	Traverse drive signal output
23	PC	O	Spindle motor ON signal output ("L" : ON)
24	ECM	O	Spindle motor drive signal output (forced mode output)
25	ECS	O	Spindle motor drive signal output (servo error signal output)
26	KICK	O	Kick pulse output
27	TRD	O	Tracking drive output
28	FOD	O	Focus drive output
29	VREF	I	D/A (drive) output (TVD, ECS, TRD, FOD, FBAL, TBAL) Reference voltage input.
30	FBAL	O	Focus balance adjustment output (Not used, open)

Pin No.	Mark	I/O	Function
31	TBAL	O	Tracking balance adjustment output
32	FE	I	Focus error signal input (analog input)
33	TE	I	Tracking error signal input (analog input)
34	RFENV	I	RF envelope signal input
35	VDET	I	Vibration detection signal input ("H" : detection)
36	OFT	I	Off-track signal input ("H" : off track)
37	TRCRS	I	Track cross signal input
38	/RFDET	I	RF detection signal input ("L" : detection)
39	BDO	I	Dropout signal input ("H" : Dropout)
40	LDON	O	Laser on signal output ("H" : ON)
41	TES	O	Tracking error shunt signal output ("H" : shunt)
42	PLAY	O	Play signal out ("H" : PLAY)
43	WVEL	O	Double speed status signal output ("H" : DS)
44	ARF	I	RF signal input
45	IREF	I	Reference current input
46	DRF	I	DSL bias (Not used, open)
47	DSLFL	I/O	DSL loop filter
48	PLLFL	I/O	PLL loop filter
49	VCOFL	I/O	VCO loop filter (Not used, open)
50	AVDD2	I	Power supply input (for analog circuit)
51	AVSS2	—	GND (for analog circuit)
52	EFM	O	EFM signal output (Not used, open)
53	PCK	O	PLL extraction clock output (Not used, open) (fPCK=4.321 MHz during normal playback)
54	PDO	O	Phase comparison signal of EFM and PCK signals (Not used, open)
55	SUBC	O	Sub-code serial data output (Not used, open)
56	SBCK	I	Clock input for sub-code serial data (Not used, open)
57	VSS	—	GND
58	X1	I	Crystal oscillating circuit input (f=16.9344MHz)
59	X2	O	Crystal oscillating circuit output (f=16.9344MHz)
60	VDD	I	Power supply input (for oscillating circuit)
61	BYTCK	O	Byte clock output (Not used, open)
62	/CLDCK	O	Sub-code frame clock signal output (fCLDCK=7.35kHz during normal playback)

Pin No.	Mark	I/O	Function
63	FCLK	O	Crystal frame clock signal output (fCLK=7.35kHz, double=14.7kHz)
64	IPFLAG	O	Interpolation flag output ("H" : interpolation) (Not used, open)
65	FLAG	O	Flag output (Not used, open)
66	CLVS	O	Spindle servo phase synchronizing signal output ("H" : CLV, "L" : rough servo) (Not used, open)
67	CRC	O	Sub-code CRC checked output ("H" : OK, "L" : NG) (Not used, open)
68	DEMPH	O	De-emphasis ON signal output ("H" : ON) (Not used, open)
69	RESY	O	Frame resynchronizing signal output (Not used, open)
70	/RST2	I	Reset input through MASH circuit ("L" : Reset)
71	/TEST	I	Test input
72	AVDD1	I	Power supply input (for analog circuit)

Pin No.	Mark	I/O	Function
73	OUTL	O	Left channel audio signal output
74	AVSS1	—	GND
75	OUTR	O	Right channel audio signal output
76	RSEL	I	RF signal polarity assignment input (at "H" level, RSEL="H", at "L" level, RSEL="L")
77	CSEL	I	Crystal oscillating frequency designation input "L" : 16.9344MHz "H" : 33.8688MHz
78	PSEL	I	Test input (normally "L") (Not used, open)
79	MSEL	I	Output frequency switching for SMCK terminal "H" : SMCK=8.4672MHz "L" : SMCK=4.2336MHz (Not used, open)
80	SSEL	I	Output mode switching of SUBQ terminal ("H" : Q code buffer mode)

• IC701 (AN8802SCE1V)

Pin No.	Mark	I/O	Function
1	PDAD	I	PDA channel signal input with delay
2	PDA	I	PDA channel signal input without delay
3	LPD	I	Laser PD connection
4	LD	O	Power supply for LD driving
5	AMPI	I	RF amplifier input
6	VCC	I	Power supply connection
7	AMPO	O	RF amplifier output (Not used, open)
8	CAGC	I	AGC loop filter connection
9	ARF	O	RF AGC output
10	CENV	I	Capacitor connection for RF detection
11	CEA	I	Capacitor connection for HPF amplifier
12	GND	—	Ground connection
13	LDON	I	ON/OFF input of LD APC("H" : ON, "L" : OFF)
14	TES	I	Tracking error shunt signal input
15	PLAY	I	Play signal input ("H" : PLAY)
16	WVEL	I	Double speed ("H" : double, "L" : single)

Pin No.	Mark	I/O	Function
17	BDO	O	Dropout detection control
18	/RFDET	O	RF detection signal ("L" : detection)
19	CROSS	O	Tracking error zero cross output
20	OFTR	O	Off-track detection ("H" : detection)
21	VDET	O	Vibration detection signal output("H" : detection)
22	ENV	O	Envelope output terminal
23	TEBPF	I	Vibration detection signal input
24	TE	O	Tracking error signal output
25	FE	O	Focus error signal output
26	PTO	O	Potentiometer inversion input (Not used, open)
27	PTI	I	Potentiometer inversion output (Not used, open)
28	TBAL	I	Tracking balance signal input
29	FBAL	I	Focus balance signal input
30	VREF	O	Reference voltage output
31	PDB	I	Photo detection Bch input without delay
32	PDBD	I	Photo detection Bch input with delay

• IC801 (M38222M2051)

Pin No.	Mark	I/O Division	Function
1	VL2	I	LCD bias reference voltage V2
2	VL1	I	LCD bias reference voltage V1
3	PCNT	O	Power control signal output
4	—	—	GND
5	—	—	GND
6	MUTE A	O	AF muting control signal output
7	—	—	GND
8	KEY1	I	Key source input
9	—	—	GND
10	FUNC	O	Mode select control signal output
11	—	—	GND
16	—	—	GND
17	TAPE ON	O	Tape detect signal output
18	BLKCLK	I	CD subcode block clock signal input
19	—	—	GND
20	SQCK	O	CD subcode clock output
21	REC H	O	REC detect signal output
22	SUBQ	I	CD subcode data input
23	CD CLOSE	I	CD close detect switch signal input
24	CD ON	O	CD detect signal output
25	—	—	GND
26	RESET SW	I	Reset SW (S701) signal input
27	RST	I	System reset signal input
28	XC IN	—	GND
29	XC OUT	—	GND
30	XIN	I	Clock input
31	XOUT	O	Clock output

Pin No.	Mark	I/O Division	Function
32	VSS		
33	—	—	GND
34	—	—	GND
35	SENSE	I	CD sense signal input
36	FLOCK	I	CD focus lock signal input
37	TLOCK	I	CD tracking signal input
38	STAT	I	CD status signal input
39	CD RST	I	CD reset signal input
40	D MUTE	O	CD muting control signal output
41	MCLK	O	CD signal process IC control signal output
42	MDATA	O	CD signal process IC data output
43	MLD	O	CD signal process IC strove signal output
44	—	—	Not used
48	—	—	Not used
49	SEG23	O	LCD segment signal output
64	SEG8	O	LCD segment signal output
65	SEG7	—	Not used
72	SEG0	—	Not used
73	VDD	I	Power supply (+5V)
74	VREF	I	A/D converter reference voltage (+5V)
75	AVSS	—	GND
76	COM3	O	LCD common signal output
79	COM0	O	LCD common signal output
80	VL3	I	LCD bias reference voltage V3

• IC703 (AN8389SE1)

Pin No.	Mark	I/O	Function
1	VCC	I	Power supply terminal
2	VREF	I	Reference voltage input
3	IN4	I	Motor driver (4) input
4	IN3	I	Motor driver (3) input
5	GND	—	Ground connection
6	NC	—	Ground connection
7	NRESET	I	Reset input
8	GND	—	Ground connection
9	IN2	I	Motor driver (2) input
10	PC2	I	PC2 (power cut) input
11	IN1	I	Motor driver (1) input
12	PC1	I	PC1 (power cut) input (Not used, open)

Pin No.	Mark	I/O	Function
17	PVCC1	I	Power supply (1) for driver
18	PGND1	—	Ground connection (1) for driver
19	D1-	O	Motor driver (1) reverse-action output
20	D1+	O	Motor driver (1) forward-action output
21	D2-	O	Motor driver (2) reverse-action output
22	D2+	O	Motor driver (2) forward-action output
23	D3-	O	Motor driver (3) reverse-action output
24	D3+	O	Motor driver (3) forward-action output
25	D4-	O	Motor driver (4) reverse-action output
26	D4+	O	Motor driver (4) forward-action output
27	PGND2	—	Ground connection (2) for driver
28	PVCC2	I	Power supply (2) for driver

■ ALIGNMENT POINTS

< TUNER SECTION >

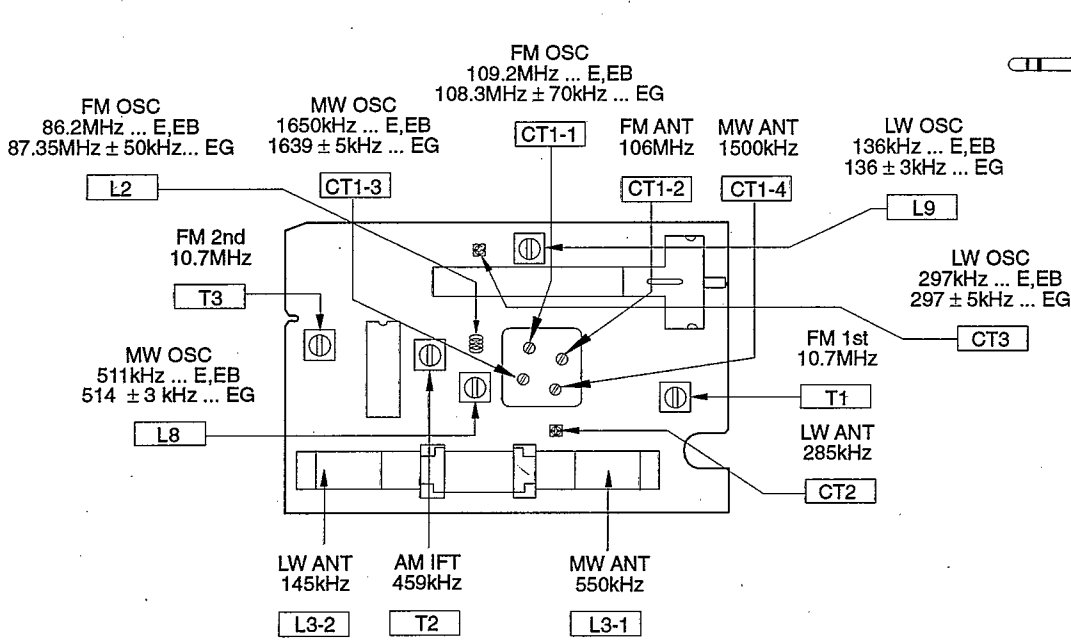


Fig. 1

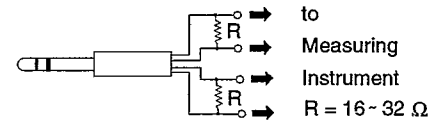


Fig.2

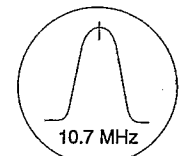


Fig.3

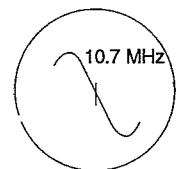


Fig. 4

MEASUREMENTS AND ADJUSTMENTS

TUNER SECTION

ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT	
<ul style="list-style-type: none"> Set power source voltage to 12V DC. Set volume control to maximum Set band switch to LW, MW or FM Set selector switch to RADIO 	<ul style="list-style-type: none"> Set XBS switch to minimum Output of signal generator should be no higher than necessary to obtain an output reading.
Note : • LW-RF alignment should be performed before MW-RF alignment. • No FM STEREO alignment is required due to Tuner IC (BA1442) is used.	

AM-IF ALIGNMENT

SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT (Shown IN Fig. 1)	REMARKS
CONNECTIONS	FREQUENCY				
Fashion a loop of several turns of wire and radiate a signal into the loop ant. of receiver.	459 kHz 30 % Mod. at 400 Hz	Point of non-interference.(on/ about 600kHz)	Headphone Jack (32Ω) <small>(Fabricate the plug as shown in Fig.2 and then connect the lead wires of the plug to the measuring instrument.)</small>	T2(AM IFT)	Adjust for maximum output.

LW-RF ALIGNMENT

"	136 kHz...E,EB 136 ± 3 kHz... EG	Tuning capacitor fully closed.	"	L9 (LW OSC Coil)	Adjust for maximum output.
"	297 kHz...E,EB 297 ± 5 kHz... EG	Tuning capacitor fully opened.	"	CT3 (LW OSC Trimmer)	Adjust for maximum output.
"	145 kHz	Tune to signal	"	[*1] L3-2 (LW ANT Coil)	Adjust for maximum output. Adjust L3-2 by moving coil bobbin along ferrite core.
"	285 kHz	"	"	CT2 (LW ANT Trimmer)	Adjust for maximum output.

[*1] Fix antenna coil with wax after completing alignment.

MW-RF ALIGNMENT

"	511 kHz...E,EB 514 ± 3 kHz... EG	Tuning capacitor fully closed.	"	L8 (MW OSC Coil)	Adjust for maximum output.
"	1650 kHz...E,EB 1639 ± 5 kHz... EG	Tuning capacitor fully opened.	"	CT1-3 (MW OSC Trimmer)	Adjust for maximum output.
"	550 kHz	Tune to signal	"	[*1] L3-1 (MW ANT Coil)	Adjust for maximum output. Adjust L3-1 by moving coil bobbin along ferrite core.
"	1500 kHz	"	"	CT1-4 (MW ANT Trimmer)	Adjust for maximum output.

[*1] Fix antenna coil with wax after completing alignment.

FM-IF ALIGNMENT

SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT (Shown IN Fig. 1)	REMARKS
CONNECTIONS	FREQUENCY				
Connect to test point TP1 through ceramic capacitor. Negative side to test point TP2 .	10.7 MHz (Sweep)	Point of non-interference.(on/ about 90 MHz)	Connect vert. amp. of scope to test point TP3 . Negative side to test point TP4 .	T1(FM 1st)	Waveform is shown in Fig. 3
"	"	"	"	T3(FM 2nd)	Waveform is shown in Fig. 4

FM-RF ALIGNMENT

Connect to test point TP1 through FM dummy antenna. Negative side to test point TP2 .	86.2 MHz...E,EB 87.35 MHz ± 50 kHz...EG	Variable capacitor fully closed.	Headphone Jack (32Ω) <small>(Fabricate the plug as shown in Fig.2 and then connect the lead wires of the plug to the measuring instrument.)</small>	L2 (FM OSC Coil)	[*2] Adjust for maximum output.
	109.2 MHz...E,EB 108.3 MHz ± 70 kHz...EG	Variable capacitor fully opened.	"	CT1-1 (FM OSC Trimmer)	"
	106MHz	Tune to signal	"	CT1-2 (FM ANT Coil)	"

[*2] Three output response will be present; proper tuning is the center frequency.

CASSETTE DECK SECTION

ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT	
Measuring Instruments <ul style="list-style-type: none"> Digital frequency counter 	Measuring condition <ul style="list-style-type: none"> Make sure the heads are clean. Make sure the capstan and pressure roller are clean. Tape-to-tape recording speed selector : NORMAL
Test tape <ul style="list-style-type: none"> Tape speed adjustment (3kHz, - 10 dB) : QZZCWAT 	Note : No Azimuth Head Alignment is required due to Aztec Head is used in the cassette mechanism.

TAPE SPEED ALIGNMENT (DECK 1,2)

Normal speed (Standard Value : 3000 ± 50 Hz ... Deck 2)
 (Standard Value : Deck 2 ± 50 Hz ... Deck 1)
 High speed (Standard Value : 5100 Hz ~)

- Test equipment connection is shown in figure.
- Set the unit to "TAPE" position.
- Playback the middle part of the test tape (QZZCWAT) in deck 2.
- Adjust VR601 for the output value shown below.
- Playback the middle part of the test tape (QZZCWAT) in deck 1.
- Repeat step 4.
- Set the unit to "HIGH" speed position.
- Place the cassette deck into the REC mode (DECK 1) and the PLAY mode (DECK 2).
- Repeat step 4.

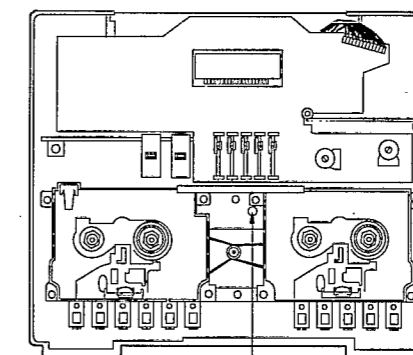
UNIT

Adjustment Target : 3000 ± 50 Hz ... Normal speed (Deck 2)
 Adjustment Target : Deck 2 ± 50 Hz ... Normal speed (Deck 1)
 Adjustment Target : 5100 Hz ~ ... High speed

Note :
 The normal speed adjustment must be done before the high speed adjustment.

ALIGNMENT POINTS

< CASSETTE DECK SECTION >



TAPE SPEED ALIGNMENT

VR601

CD PLAYER SECTION

Warning : This product uses a laser diode. Refer to caution statements on page 2.

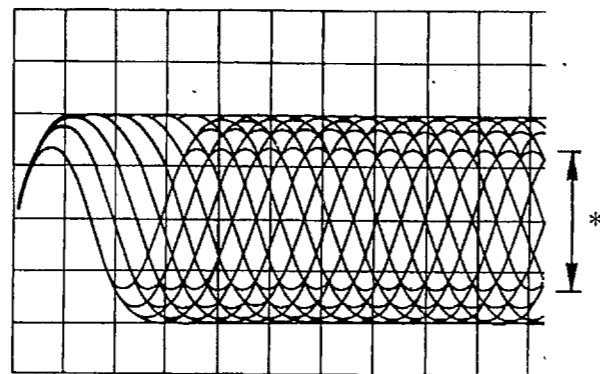
Caution : It is very dangerous to look or touch the laser beam. (laser radiation is invisible)
With the unit turned "on", laser radiation is emitted from the pickup lens.
Avoid exposure to the laser beam, especially when performing adjustments.

Measuring Instruments and Special Tools

- * Test discs
 1. Playability test disc (SZZP1054C).
 2. Uneven test disc (SZZP1056C).
- * Musical program disc (ordinary).
- * Dual-beam oscilloscope with bandwidth of 30 MHz or better (with EXT. trigger and 1 : 1 probe).
- * Allen wrench (M2.0) (SZZP1101C).
- * Lock paint (RZZ0L01)

(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 if the traverse deck has not been replaced.
1. Connect the oscilloscope's CH.1 probe across **TJ701** (RF) (+) and **TJ702** (V-Ref.) (-) on the servo P.C.B.
Oscilloscope setting : VOLT 200mV.
SWEEP 0.5μs.
Input coupling AC.
 2. Switch the player power **ON**, and play track **19** on the test disc (SZZ1056C). (Playing any other track will prevent the HEX screws from being accessed.)
 3. Leave the player in play mode.
 4. Alternately adjust the HEX screws with the 2.0mm allen wrench (SZZP1101C) until the vertical fluctuation of RF signal is minimized and the eye pattern is most stretched. (Refer to Fig. 2 on page 36)
 5. After completing the adjustment, lock the HEX screws with lock paint (RZZ0L01).



* Most stretched eye pattern

(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 0.7mm black dot and the 0.7mm 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 (SZZP1056C) and verify that no sound skip or noise occurs.

ALIGNMENT POINTS

< CD PLAYER SECTION >

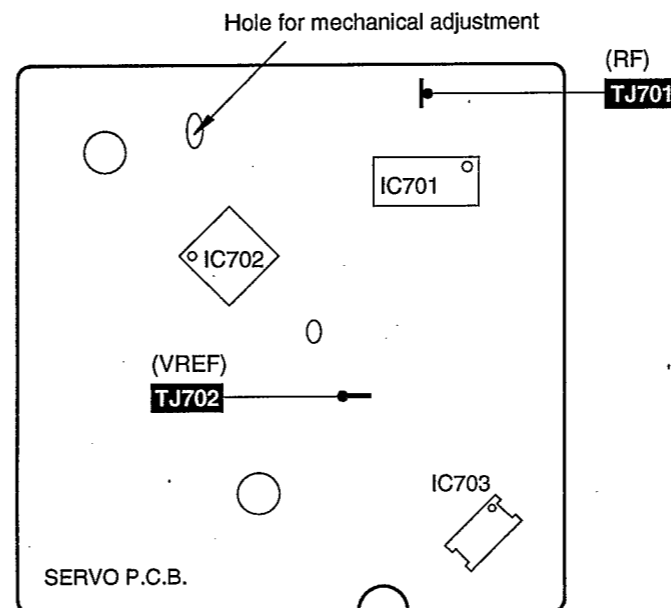


Fig.1

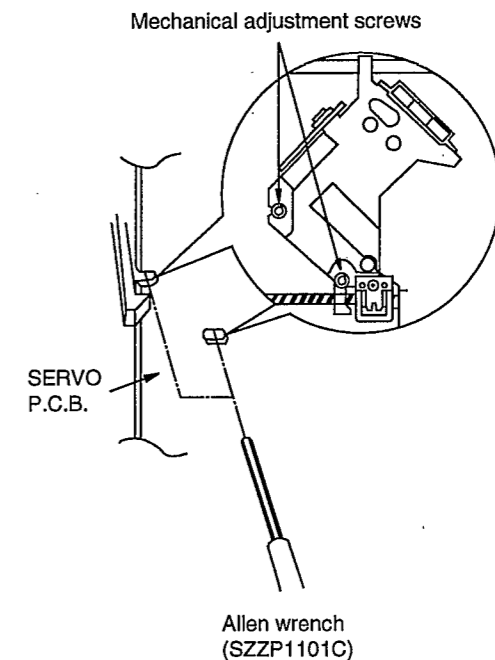
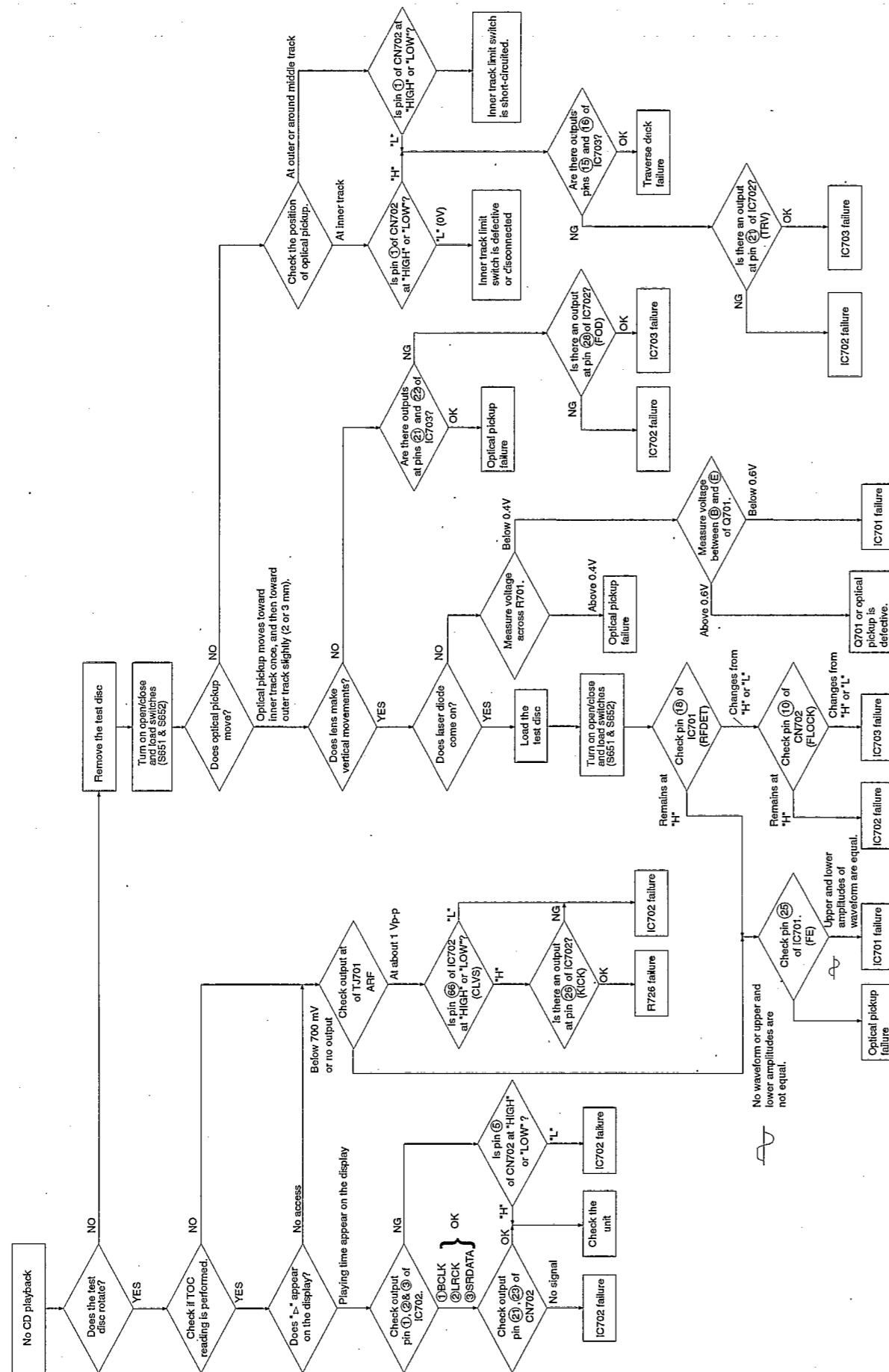


Fig.2

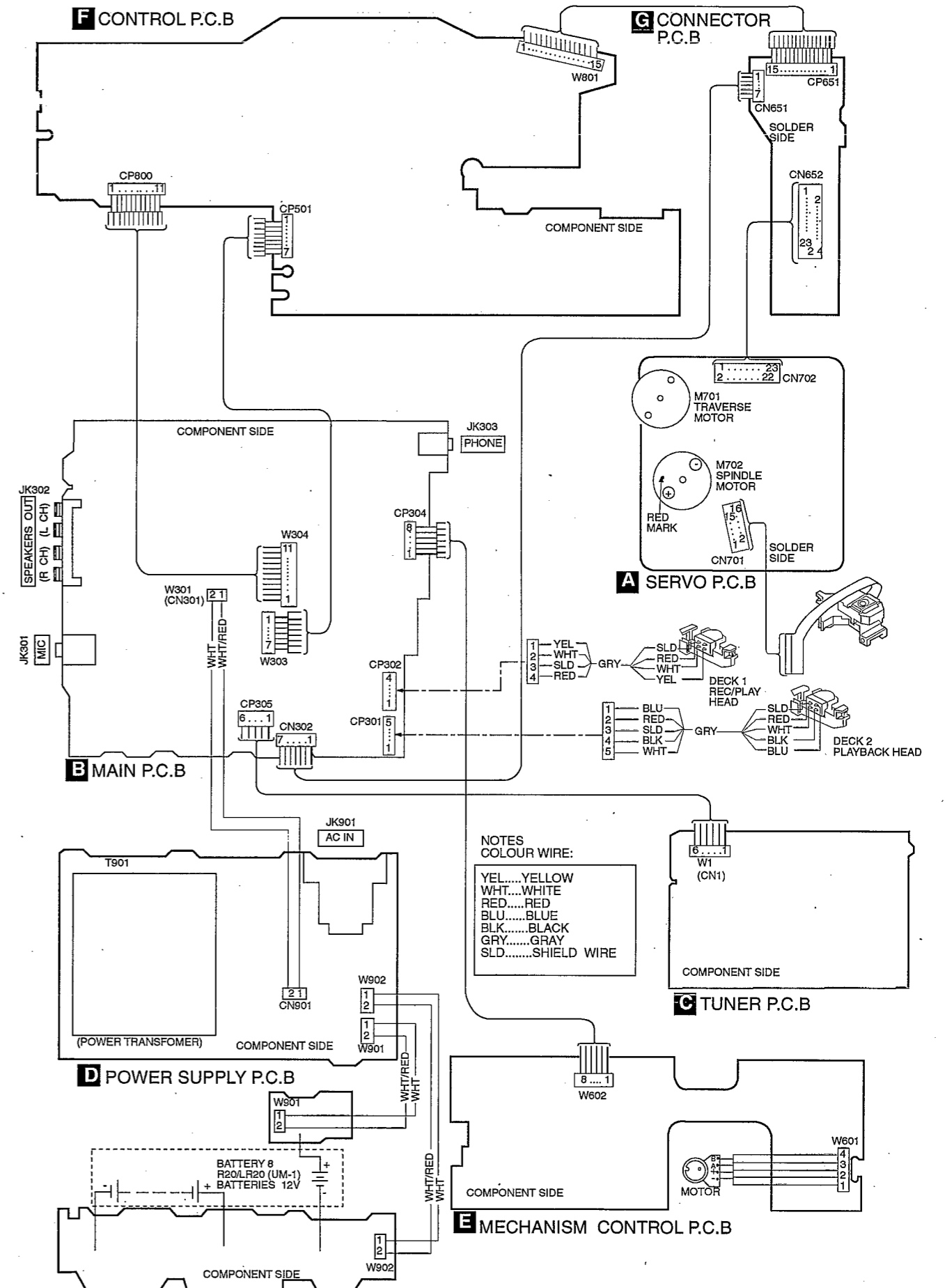
TERMINAL GUIDE OF ICs, TRANSISTORS & DIODES

AN7135 	AN7205 	AN7317 	AN8389SE1 	AN8802SCE1V 32 Pin 	BA1442
BA3822LS 	BA3936 	BA7755A 	M38222M2051 80 Pin 	MN66271RA 80 Pin 	S-806D-Z
2SC1684RTA 2SC1684STA 2SC829BTA 	2SB709S 	2SC2785FTA 	2SJ40CDTA 	2SK301QTA 	RVTDTA114EST RVTDTTC114EST
2SC4408TPE6 	RVD1SS133TA 	SLB55VRF35 	MA4056N-MTA 	RVDMTZ16BTA RVDMTZ5R6BTA 	RL203M11

■ TROUBLESHOOTING GUIDE



■ WIRING CONNECTION DIAGRAM



MECHANISM PARTS LOCATION (RAA0906)

1 2 3 4 5 6 7 8 9

DECK 1 (For recording and playback)

DECK 2 (For playback only)

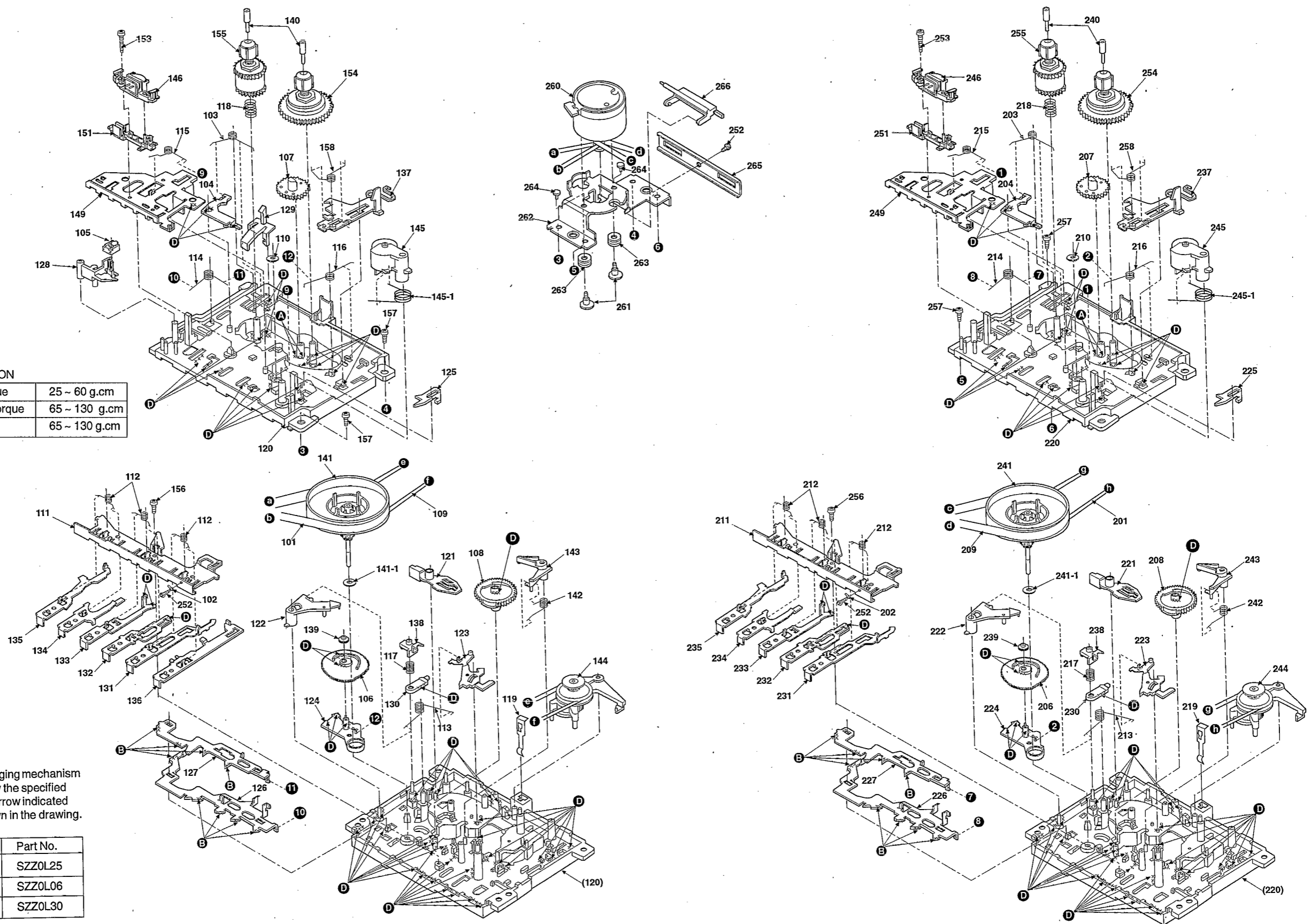
A
B
C
D
E
F

SPECIFICATION

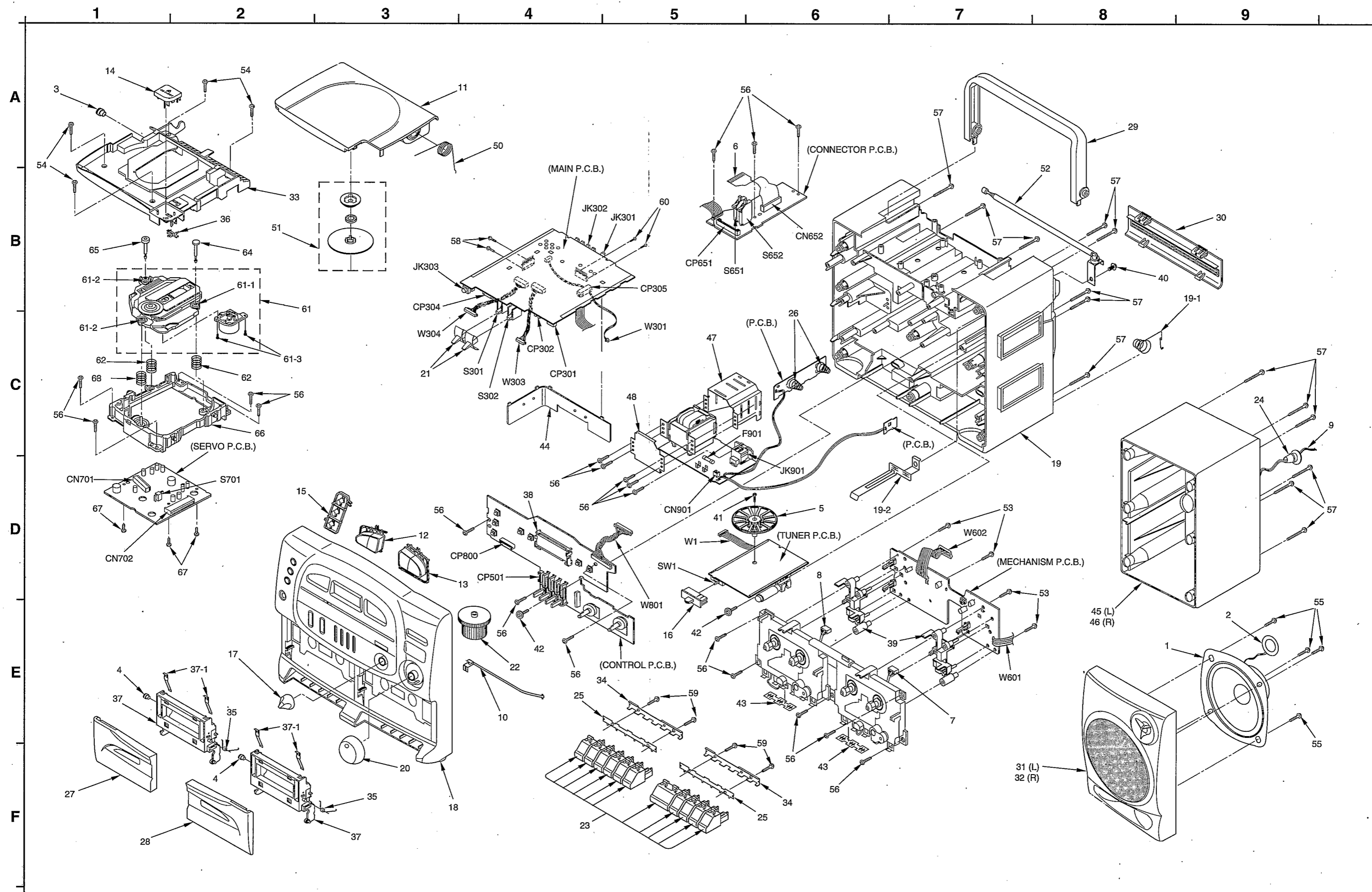
Playback torque	25 ~ 60 g.cm
Fast forward torque	65 ~ 130 g.cm
Rewind torque	65 ~ 130 g.cm

Note :
When changing mechanism parts, apply the specified grease to arrow indicated areas shown in the drawing.

Ref No.	Part No.
A	SZZ0L25
B	SZZ0L06
D	SZZ0L30



■ CABINET PARTS LOCATION



REPLACEMENT PARTS LIST

Notes: * Important safety notice:

 Components identified by Δ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.

When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

* 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.

* Warning : This product uses a laser diode. Refer to caution statements on page 2.

ACHTUNG : Die Lasereinheit nicht zerlegen.

Die Lasereinheit darf nur gegen eine vom hersteller spezifizierte einheit ausgetauscht werden.

* [M] Indicates in the Remarks columns indicates parts supplied by MESA.

RefNo.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS					
1	EASG12P516A2	WOOFER	[M]	35	RME0002	OPEN SPRING	[M]
2	RAT0002	TWEETER	[M]	36	RMLX0009-KJ	CD EJECT LEVER	[M]
3	RDG5782YC	CD LID DAMPER GEAR	[M]	37	RFKLXDT670P3	CASS. HOLDER ASS'Y	[M]
4	RDG5874ZB	DAMPER GEAR	[M]	37-1	RUS757ZAA	CASS. HALF SPRING	[M]
5	RDGX0007-W	VARICON GEAR	[M]	38	RMNX0004-W	LCD HOLDER	[M]
6	REE0397	FPC WIRE	[M]	39	RMR0368	CHASSIS	[M]
7	REXX0069	DK 2 TP HEAD WIRE	[M]	40	XYN3+F8FY	R. ANTENNA SCREW	
8	REXX0074	DK 1 TP HEAD WIRE	[M]	41	XYN26+C6	VARICON GEAR SCREW	
9	REXX0089	SPEAKER WIRE	[M]	42	XTWS3+10Q	TUNER PCB SCREW	
10	RGJX0011-W	POINTER	[M]	43	RMXX0004	SPACER	[M]
11	RGKX0006-K	CD LID	[M]	44	RMYX0007	HEAT SINK	[M]
12	RGUX0049-K1	CD FUNCTION BUTTON	[M]	45	RFKHXTD610PA	SP BACK CAB ASS'Y(L)	[M]
13	RGUX0050-K1	CD FUNCTION BUTTON	[M]	46	RFKHXTD610PB	SP BACK CAB ASS'Y(R)	[M]
14	RGUX0051-K	CD EJECT BUTTON	[M]	47	RSCX0020	TRANS SHIELD PLATE 1	[M]
15	RGUX0067-K1	CD FUNCTION BUTTON	[M]	48	RSCX0021	TRANS SHIELD PLATE 2	[M]
16	RGVX0011-K	BAND KNOB	[M]	50	RUW217ZA	OPEN SPRING	[M]
17	RGWX0014-K	XBS KNOB	[M]	51	RFKNXDT680PB	CD CLAMPER ASS'Y	[M]
18	RFKXDT600EK	FRONT CAB. ASS'Y	[M] (E, EB)	52	XEARR175ED-Y	ROD ANTENNA	
18	RFKXDT600EGK	FRONT CAB. ASS'Y	[M] (EG)	53	XTN2+14GF	SCREW FOR PCB	[M]
19	RFKHXTD600EK	REAR CAB. ASS'Y	[M] (E)	54	XTV3+12GFZ	TOP CAB SCREW	
19	RFKHDT600EBK	REAR CAB. ASS'Y	[M] (EB)	55	XTV3+10G	WOOFER SCREW	
19	RFKHDT600EGK	REAR CAB. ASS'Y	[M] (EG)	56	XTV3+12G	MOUNTING SCREW	
19-1	RJC931ZC	BATTERY SPRING		57	XTV3+20G	SPEAKER CASING SCREW	
19-2	RMAX0011	ANTENNA SPRING	[M]	58	XTV3+8F	SCREW FOR IC AN7135	
20	RGWX0015-K	VOLUME KNOB	[M]	59	XTV3+8G	MECHA BUTTON SCREW	
21	RGWX0016-K	SELECTOR KNOB	[M]	60	XTW3+10F	SCREW FOR IC BA3936	
22	RGXX0009-K	TUNING KNOB	[M]	61	RAE0113Z	TRAVERSE UNIT	
23	RGZX0014-K	MECHA BUTTON BLOCK	[M]	61-1	SHGD112	FLOATING RUBBER (A)	
24	RHG2152ZA	CORD RUBBER	[M]	61-2	SHGD113-1	FLOATING RUBBER (B)	
25	RHRX0008	MECHA BUTTON SEAT	[M]	61-3	XQS2+A35FZ	SCREW	
26	RJC511ZBS	BATT SPRING	[M]	62	RME0109	FLOATING SPRING A	
27	RFKLXDT600P1	CASS. LID ASS'Y (L)	[M]	63	RME0142	FLOATING SPRING B	
28	RFKLXDT600P2	CASS. LID ASS'Y (R)	[M]	64	RMS0123-1	FIXED PIN A	
29	RKH0002-K	HANDLE	[M]	65	RMS0350	FIXED PIN B	
30	RKK2SZA-0	BATTERY COVER	[M]	66	RMR0698-K	TRAVERSE CHASSIS	
31	RFKXDT600PA	SP FR CAB. ASS'Y(L)	[M]	67	XTV2+6G	SCREW	
32	RFKXDT600PB	SP FR CAB. ASS'Y(R)	[M]			INTEGRATED CIRCUITS	
33	RKQX0002-K	TOP CAB	[M]	IC1	AN7205	IC, RF	
34	RMAX0006	ANGLE BAR	[M]	IC2	BA1442	IC, MPX/IF	[M]

RefNo.	Part No.	Part Name & Description	Remarks
IC301	AN7317	IC, REC/PLAY	[M]
IC302	BA7755A	IC, ANALOG SW	
IC303	BA3936	IC, REGULATOR	△
IC304	AN7135	IC, POWER	
IC501	BA3822LS	IC, GEQ	
IC801	M38222M2051	IC, U-PROCESSOR	[M]
IC802	S-806D-Z	IC, RESET	[M]
		TRANSISTORS	
Q1	2SC829BTA	TRANSISTOR	
Q101	2SJ40CDTA	TRANSISTOR	
Q102	2SJ40CDTA	TRANSISTOR	
Q103	2SC1684RTA	TRANSISTOR	
Q104	2SC1684RTA	TRANSISTOR	
Q105	2SC1684RTA	TRANSISTOR	
Q201	2SJ40CDTA	TRANSISTOR	
Q202	2SJ40CDTA	TRANSISTOR	
Q203	2SC1684RTA	TRANSISTOR	
Q204	2SC1684RTA	TRANSISTOR	
Q205	2SC1684RTA	TRANSISTOR	
Q301	2SC1684RTA	TRANSISTOR	
Q302	2SC1684RTA	TRANSISTOR	
Q304	2SC1684RTA	TRANSISTOR	
Q305	RVTDTC114EST	TRANSISTOR	
Q306	RVTDTC114EST	TRANSISTOR	
Q308	2SC1684RTA	TRANSISTOR	
Q309	2SC1684RTA	TRANSISTOR	
Q310	RVTDTA114EST	TRANSISTOR	
Q312	2SC2785FTA	TRANSISTOR	
Q313	2SC2785FTA	TRANSISTOR	
Q601	2SK301QTA	TRANSISTOR	[M]
Q602	2SC1684STA	TRANSISTOR	
Q951	2SC4408TPE6	TRANSISTOR	[M]
		DIODES	
D1	RVD1SS133TA	DIODE	
D2	RVD1SS133TA	DIODE	
D301	RVD1SS133TA	DIODE	
D302	RVD1SS133TA	DIODE	
D304	RVD1SS133TA	DIODE	
D305	RVD1SS133TA	DIODE	
D306	RVD1SS133TA	DIODE	
D307	RVD1SS133TA	DIODE	
D308	RVD1SS133TA	DIODE	
D309	RVD1SS133TA	DIODE	
D311	RVD1SS133TA	DIODE	

RefNo.	Part No.	Part Name & Description	Remarks
D314	RVD1SS133TA	DIODE	
D315	RVD1SS133TA	DIODE	
D353	MA4056N-MTA	DIODE	[M]
D354	RVDMTZ5R6BTA	DIODE	
D800	RVD1SS133TA	DIODE	
D802	SLB55VRF35	DIODE	[M]
D803	SLB55VRF35	DIODE	[M]
D901	RL203M11	DIODE	△
D902	RL203M11	DIODE	△
D903	RL203M11	DIODE	△
D904	RL203M11	DIODE	△
D952	RVDMTZ16BTA	DIODE	[M]
		VARIABLE RESISTORS	
VR501	EWAJQAW05G54	VR, GEQ (330Hz)	[M]
VR502	EWAJQAW05G54	VR, GEQ (1kHz)	[M]
VR503	EWAJQAW05G54	VR, GEQ (3.3kHz)	[M]
VR504	EWAJQAW05G54	VR, GEQ (10kHz)	[M]
VR506	EWC2UAF15C54	VR, XBS	[M]
VR507	EWCT5AF15B54	VR, VOLUME	[M]
VR508	EWAJUAW05G15	VR, BALANCE	[M]
VR601	EVNDXAA00B24	VR, FM VCO	
		VARIABLE CAPACITORS	
VC1	RCV4RC2V2K-M	VARICON	
CT2	ECRLA030E53R	TRIMMER	
CT3	ECRLA020E53R	TRIMMER	
		SWITCHES	
S301	RST3D001-H	SW, FUNCTION	[M]
S302	RST3B35ZA-H	SW, EDITING	[M]
S601	RSH1A013-J	SW, DECK 1 PLAY	[M]
S602	RSH1A013-J	SW, DECK 2 PLAY	[M]
S603	RSH1A004-1	SW, REC	[M]
S651	RSH1A012-U	SW, CD OPEN/CLOSE	
S652	RSH1A012-U	SW, CD LOADING	
S901	RJJ1SE01-H	SW, AC IN (JK901)	△
SW1	RSS3H001-H	SW, BAND	[M]
SW601	RSH1A006-U	SW, MOTOR	[M]
SW801	EVQ21405R	SW, MEMORY	
SW802	EVQ21405R	SW, EASY EDIT	
SW803	EVQ21405R	SW, REPEAT	
SW804	EVQ21405R	SW, R.SKIP/SEARCH	
SW805	EVQ21405R	SW, F.SKIP/SEARCH	
SW806	EVQ21405R	SW, STOP/CLEAR	

Ref No.	Part No.	Part Name & Description	Remarks
SW807	EVQ21405R	SW, PLAY PAUSE	
		CONNECTORS	
CN652	RJS1A6823	FFC SOCKET (23P)	
CN901	RJP2G4YA	CONNECTOR (02P)	
CP301	RJP5G18ZA	CONNECTOR (05P)	
CP302	RJP4G18ZA	CONNECTOR (04P)	
CP304	RJP6G4YA	CONNECTOR (06P)	
CP305	RJP6G4YA	CONNECTOR (06P)	
CP501	RJP7G18ZA	CONNECTOR (07P)	
CP651	RJP15G18ZA	CONNECTOR (15P)	
CP800	RJP11G18ZA	CONNECTOR (11P)	
		COILS & TRANSFORMERS	
L2	RLD4Y53W	OSC COIL	[M] (E, EB)
L2	RL04P002-E	OSC COIL	[M] (EG)
L3	RLV6C009-0	AM FERRITE ANT	[M]
L8	RL02B108-M	MW OSC COIL	
L9	RL01B13-M	LW OSC COIL	
L301	RL09B17-T	AC BIAS COIL	
L601	RLQZB470KT-D	COIL	
T1	RLI4B153-M	FM IFT	
T2	RLI2B153-M	AM IFT	
T3	RLI4B153-M	FM IFT	
T901	RTP1U1B002-X	POWER TRANSFORMER	[M] ⚠
		DISPLAY	
Z801	RSL5107-L	LCD	[M]
		CERAMIC FILTERS	
CF1	RVF107WDZT	FM CF	
CF2	RVFSFZ459JL	AM CF	[M]
		OSCILLATOR	
X800	RSXY4M19M03T	4.19 MHZ RESONATOR	[M]
		FUSE	
F901	XBA2C20TB0	FUSE	⚠
		FUSE CLIPS	
FC1	EYF52BC	FUSE CLIP	

Ref No.	Part No.	Part Name & Description	Remarks
FC2	EYF52BC	FUSE CLIP	
		JACKS	
JK301	RJJ1D25ZA-C	JK, MIC	
JK302	RJF1098ZA-H	JK, SPEAKER	[M]
JK303	RJJ37TK01-C	JK, HEADPHONE	[M]
JK901	RJJ1SE01-H	JK, AC IN	⚠
		WIRES	
W1	REXX0087	TUNER TO MAIN WIRE	[M]
W301	REXX0073-1	MAIN TO POWER WIRE	[M]
W303	REXX0065	MAIN TO CONTROL WIRE	[M]
W304	REXX0064	MAIN TO CONTROL WIRE	[M]
W602	REXX0072	MECH-MAIN 6 FLAT WIRE	[M]
W801	REXX0066	CONTROL TO LEAF SW WIRE	[M]
		< SERVO >	
		INTEGRATED CIRCUITS	
IC701	AN8802SCE1V	IC, HEAD AMP	
IC702	MN66271RA	IC, DIGITAL LSI	
IC703	AN8389SE1	IC, 4-CH DRIVER	
		TRANSISTOR	
Q701	2SB709S	TRANSISTOR	
		SWITCH	
S701	RSM0006-P	SW, RESET	
		CONNECTORS	
CN701	RJU035T016-1	CONNECTOR (16P)	
CN702	RJS1A6723-1Q	CONNECTOR (23P)	
		OSCILLATOR	
X701	RSXZ16M9M02T	CERAMIC OSC	
		CHIP JUMPERS	
RJ701	ERJ8GEY0R00A	0 1/10W	
RJ702	ERJ8GEY0R00A	0 1/10W	
RJ703	ERJ8GEY0R00A	0 1/10W	
RJ704	ERJ8GEY0R00A	0 1/10W	

Ref No.	Part No.	Part Name & Description	Remarks
RJ707	ERJ8GEY0R00A	0 1/10W	
RJ708	ERJ8GEY0R00A	0 1/10W	
RJ709	ERJ8GEY0R00A	0 1/10W	
RJ714	ERJ8GEY0R00A	0 1/10W	
RJ715	ERJ8GEY0R00A	0 1/10W	
RJ716	ERJ8GEY0R00A	0 1/10W	
RJ717	ERJ8GEY0R00A	0 1/10W	
RJ721	ERJ6GEY0R00A	0 1/10W	
RJ724	ERJ6GEY0R00A	0 1/10W	

Ref No.	Part No.	Part Name & Description	Remarks
RJ725	ERJ6GEY0R00A	0 1/10W	
RJ726	ERJ6GEY0R00A	0 1/10W	
RJ799	ERJ6GEY0R00A	0 1/10W	
		TEST JUMPERS	
TJ701	EYF8CU	TEST JUMPER	
TJ702	EYF8CU	TEST JUMPER	

RESISTORS & CAPACITORS

Notes :

- * Capacitor values are in microfarads (μF) unless specified otherwise, P=Pico-farads (pF), F=Farads.
- * Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM).
- * Bracketed indications in Ref. No. columns specify the area (Refer to the first page for area).
- Parts without these indications can be used for all areas.
- * [M] Indicates in the values & remarks column indicates parts supplied by MESA

Ref. No.	Part No.	Values & Remarks
RESISTORS		
R2	ERDS2TJ334T	330K 1/4W
R3	ERDS2TJ471T	470 1/4W
R4	ERDS2TJ330T	33 1/4W
R5	ERDS2TJ101T	100 1/4W
R6	ERDS2TJ8R2T	8.2 1/4W
R8	ERDS2TJ680T	68 1/4W
R10	ERDS2TJ103T	10K 1/4W
R11	ERDS2TJ221T	220 1/4W
R12	ERDS2TJ332T	3.3K 1/4W
R14	ERDS2TJ103T	10K 1/4W
R101	ERDS2TJ183T	18K 1/4W
R103	ERDS2TJ103T	10K 1/4W
R104	ERDS2TJ562T	5.6K 1/4W
R105	ERDS2TJ472T	4.7K 1/4W
R106	ERDS2TJ390T	39 1/4W
R107	ERDS2TJ102T	1K 1/4W
R108	ERDS2TJ123T	12K 1/4W
R109	ERDS2TJ273T	27K 1/4W
R110	ERDS2TJ102T	1K 1/4W
R111	ERDS2TJ123T	12K 1/4W
R121	ERDS2TJ273T	27K 1/4W
R123	ERDS2TJ473T	47K 1/4W
R124	ERDS2TJ123T	12K 1/4W
R125	ERDS2TJ472T	4.7K 1/4W
R140	ERDS2TJ332T	3.3K 1/4W
R141	ERDS2TJ104T	100K 1/4W
R142	ERDS2TJ822T	8.2K 1/4W
R163	ERDS2TJ823T	82K 1/4W
R164	ERDS2TJ2R7T	2.7 1/4W
R165	ERDS2TJ121T	120 1/4W
R166	ERDS2TJ223T	22K 1/4W
R201	ERDS2TJ183T	18K 1/4W
R203	ERDS2TJ103T	10K 1/4W
R204	ERDS2TJ562T	5.6K 1/4W

Ref. No.	Part No.	Values & Remarks
R205	ERDS2TJ472T	4.7K 1/4W
R206	ERDS2TJ390T	39 1/4W
R207	ERDS2TJ102T	1K 1/4W
R208	ERDS2TJ123T	12K 1/4W
R209	ERDS2TJ273T	27K 1/4W
R210	ERDS2TJ102T	1K 1/4W
R211	ERDS2TJ123T	12K 1/4W
R221	ERDS2TJ273T	27K 1/4W
R223	ERDS2TJ473T	47K 1/4W
R224	ERDS2TJ123T	12K 1/4W
R225	ERDS2TJ472T	4.7K 1/4W
R240	ERDS2TJ332T	3.3K 1/4W
R241	ERDS2TJ104T	100K 1/4W
R242	ERDS2TJ822T	8.2K 1/4W
R263	ERDS2TJ823T	82K 1/4W
R264	ERDS2TJ2R7T	2.7 1/4W
R265	ERDS2TJ121T	120 1/4W
R266	ERDS2TJ223T	22K 1/4W
R301	ERDS2TJ222T	2.2K 1/4W
R302	ERDS2TJ105T	1M 1/4W
R303	ERDS2TJ470T	47 1/4W
R304	ERDS2TJ332T	3.3K 1/4W
R305	ERDS2TJ101T	100 1/4W
R320	ERDS2TJ334T	330K 1/4W
R321	ERDS2TJ334T	330K 1/4W
R322	ERDS2TJ103T	10K 1/4W
R323	ERDS2TJ101T	100 1/4W
R324	ERDS2TJ103T	10K 1/4W
R341	ERDS2TJ560T	56 1/4W
R343	ERDS2TJ223T	22K 1/4W
R344	ERDS2TJ472T	4.7K 1/4W
R345	ERDS2TJ106T	10M 1/4W
R346	ERDS2TJ221T	220 1/4W
R347	ERDS2TJ224T	220K 1/4W
R348	ERDS2TJ100T	10 1/4W
R349	ERDS2TJ681T	680 1/4W

Ref. No.	Part No.	Values & Remarks
R351	ERDS2TJ472T	4.7K 1/4W
R352	ERDS2TJ103T	10K 1/4W
R353	ERDS2TJ102T	1K 1/4W
R360	ERDS2TJ183T	18K 1/4W
R361	ERDS2TJ472T	4.7K 1/4W
R362	ERDS2TJ222T	2.2K 1/4W
R363	ERDS2TJ823T	82K 1/4W
R364	ERDS2TJ122T	1.2K 1/4W
R365	ERDS2TJ123T	12K 1/4W
R366	ERDS2TJ151T	150 1/4W
R367	ERDS2TJ151T	150 1/4W
R368	ERDS2TJ151T	150 1/4W
R369	ERDS2TJ680T	68 1/4W
R379	ERDS2TJ101T	100 1/4W
R380	ERDS2TJ330T	33 1/4W
R381	ERDS2TJ273T	27K 1/4W
R382	ERDS2TJ103T	10K 1/4W
R385	ERDS2TJ103T	10K 1/4W
R386	ERDS2TJ103T	10K 1/4W
R390	ERDS2TJ103T	10K 1/4W
R391	ERDS2TJ103T	10K 1/4W
R392	ERDS2TJ821T	820 1/4W
R393	ERDS2TJ822T	8.2K 1/4W
R394	ERDS2TJ821T	820 1/4W
R395	ERDS2TJ101T	100 1/4W
R396	ERDS2TJ223T	22K 1/4W
R397	ERDS2TJ332T	3.3K 1/4W
R399	ERDS2TJ121T	120 1/4W
R444	ERDS2TJ102T	1K 1/4W
R446	ERDS2TJ392T	3.9K 1/4W
R447	ERDS2TJ473T	47K 1/4W
R448	ERDS2TJ153T	15K 1/4W
R544	ERDS2TJ102T	1K 1/4W
R546	ERDS2TJ392T	3.9K 1/4W
R547	ERDS2TJ473T	47K 1/4W
R548	ERDS2TJ153T	15K 1/4W

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
R601	ERDS2TJ123T	12K 1/4W	C28	ECEA1HKA010B	1 50V	C320	ECEA1CKA100B	10 16V
R602	ERDS2TJ273T	27K 1/4W	C29	ECEA1HKA010B	1 50V	C321	ECEA1AKA220B	22 10V
R604	ERDS2TJ273T	27K 1/4W	C30	ECBT1H330J5	33P 50V	C322	ECFR1C473MR	0.047 16V
R605	ERDS2TJ105T	1M 1/4W	C31	ECBT1H4R7KC5	4.7P 50V	C323	ECEA1AKA101B	100 10V
R606	ERDS2TJ472T	4.7K 1/4W	C33	ECFR1C223MR	0.022 16V	C324	ECEA1AKA220B	22 10V
R651	ERDS2TJ103T	10K 1/4W	C34	ECBT1H200JC5	20P 50V	C343	ECQP2A331JZT	330P 100V
R652	ERDS2TJ563T	56K 1/4W	C36	ECQP2A361JZT	360P 100V	C345	ECQP2A151JZT	150P 100V
R662	ERDS2TJ563T	56K 1/4W	C37	ECQP2A221JZT	220P 100V	C346	ECQB1H122JF3	1200P 50V
R800	ERDS2TJ822T	8.2K 1/4W	C39	ECQP2A151JZT	150P 100V	C347	ECEA1AKA101B	100 10V
R801	ERDS2TJ562T	5.6K 1/4W	C40	ECBT1C103NS5	0.01 16V	C348	ECBT1C103MS5	0.01 16V
R802	ERDS2TJ392T	3.9K 1/4W	C45	ECFR1C273MR	0.027 16V	C351	ECBT1C103MS5	0.01 16V
R803	ERDS2TJ272T	2.7K 1/4W	C101	ECBT1H681KB5	680P 50V	C352	ECEA1EKA4R7B	4.7 25V
R804	ERDS2TJ222T	2.2K 1/4W	C102	ECBT1H102KB5	1000P 50V	C360	ECEA1HKA010B	1 50V
R805	ERDS2TJ152T	1.5K 1/4W	C103	ECEA0JKA101B	100 6.3V	C362	ECEA1EU101B	100 25V
R810	ERDS2TJ153T	15K 1/4W	C104	ECFR1C333MR	0.033 16V	C363	ECEA0JKA101B	100 6.3V
R811	ERDS2TJ104T	100K 1/4W	C105	ECEA1CKA100B	10 16V	C380	ECEA1AU221B	220 10V
R812	ERDS2TJ104T	100K 1/4W	C106	ECBT1H101KB5	100P 50V	C381	ECEA1HKA3R3B	3.3 50V
R813	ERDS2TJ104T	100K 1/4W	C107	ECEA1CKA100B	10 16V	C382	ECEA1EKA470B	47 25V
R814	ERDS2TJ472T	4.7K 1/4W	C108	ECBT1H101KB5	100P 50V	C383	ECEA1EKA470B	47 25V
R817	ERDS2TJ273T	27K 1/4W	C109	ECBT1H102KB5	1000P 50V	C384	ECEA1CKA101B	100 16V
R818	ERDS2TJ474T	470K 1/4W	C110	ECEA1CKA100B	10 16V	C385	ECEA1AU221B	220 10V
R819	ERDS2TJ104T	100K 1/4W	C140	ECFR1C153MR	0.015 16V	C386	ECEA1EU101B	100 25V
R820	ERDS2TJ183T	18K 1/4W	C141	ECEA1HKA010B	1 50V	C388	ECA1EM332BV	3300P 25V [M]
R825	ERDS2TJ151T	150 1/4W	C161	ECEA1HKA010B	1 50V	C390	ECEA1AU221B	220 10V
R901	ERDS2TJ222T	2.2K 1/4W	C162	ECBT1H102KB5	1000P 50V	C392	ECEA1AKA101B	100 10V
R952	ERDS2TJ102T	1K 1/4W	C163	ECEA1AKA101B	100 10V	C443	ECBT1H471KB5	470P 50V
R953	ERDS2TJ101T	100 1/4W	C164	ECBT1H471KB5	470P 50V	C444	ECFR1C104KR	0.1 16V
			C165	ECEA1AKA470B	47 10V	C445	ECBT1H102KB5	1000P 50V
		CAPACITORS	C166	ECFR1C104MR	0.1 16V	C446	ECBT1C332MR5	3300P 16V
			C167	ECEA1AU102B	1000 10V	C447	ECBT1C103MS5	0.01 16V
C2	ECBT1H470J5	47P 50V	C201	ECBT1H681KB5	680P 50V	C448	ECEA1CKA100B	10 16V
C3	ECBT1H220JC5	22P 50V	C202	ECBT1H102KB5	1000P 50V	C449	ECEA1HKAR68B	0.68 50V
C4	ECBT1H100JC5	10P 50V	C203	ECEA0JKA101B	100 6.3V	C450	ECFR1C333KR	0.033 16V
C5	ECBT1H102KB5	1000P 50V	C204	ECFR1C333MR	0.033 16V	C451	ECEA1HKA0R1B	0.1 50V
C6	ECBT1H102KB5	1000P 50V	C205	ECEA1CKA100B	10 16V	C452	ECEA1HKAR33B	0.33 50V
C7	ECBT1H4R7KC5	4.7P 50V	C206	ECBT1H101KB5	100P 50V	C453	ECFR1C153KR	0.015 16V
C8	ECBT1H150JC5	15P 50V	C207	ECEA1CKA100B	10 16V	C455	ECEA1HKA010B	1 50V
C9	ECBT1H102KB5	1000P 50V	C208	ECBT1H101KB5	100P 50V	C456	ECBT1H102KB5	1000P 50V
C10	ECBT1H120JC5	12P 50V	C209	ECBT1H102KB5	1000P 50V	C457	ECFR1C473KR	0.047 16V
C11	ECBT1H200JC5	20P 50V (E, EB)	C210	ECEA1CKA100B	10 16V	C543	ECBT1H471KB5	470P 50V
C11	ECCR1H240JC5	24P 50V (EG)	C240	ECFR1C153MR	0.015 16V	C544	ECFR1C104KR	0.1 16V
C12	ECFR1C223MR	0.022 16V	C241	ECEA1HKA010B	1 50V	C545	ECBT1H102KB5	1000P 50V
C13	ECFR1C223MR	0.022 16V	C261	ECEA1HKA010B	1 50V	C546	ECBT1C332MR5	3300P 16V
C14	ECBT1H221KB5	220P 50V	C262	ECBT1H102KB5	1000P 50V	C547	ECBT1C103MS5	0.01 16V
C15	ECEA1HKA010B	1 50V	C263	ECEA1AKA101B	100 10V	C548	ECEA1CKA100B	10 16V
C16	ECBT1C682MR5	6800P 16V	C264	ECBT1H471KB5	470P 50V	C549	ECEA1HKAR68B	0.68 50V
C17	ECEA1EKA100B	10 25V	C265	ECEA1AKA470B	47 10V	C550	ECFR1C333KR	0.033 16V
C18	ECEA1CKA470B	47 16V	C266	ECFR1C104MR	0.1 16V	C551	ECEA1HKA0R1B	0.1 50V
C20	ECEA0JKA101B	100 6.3V	C267	ECEA1AU102B	1000 10V	C552	ECEA1HKAR33B	0.33 50V
C21	ECBT1H102KB5	1000P 50V	C301	ECFR1C223MR	0.022 16V	C553	ECFR1C153KR	0.015 16V
C22	ECFR1C473MR	0.047 16V	C302	ECFR1C683MR	0.068 16V	C555	ECEA1HKA010B	1 50V
C23	ECEA1HKAR22B	0.22 50V	C303	ECBT1H102KB5	1000P 50V	C556	ECBT1H102KB5	1000P 50V
C24	ECEA1EKA100B	10 25V	C304	ECBT1H102KB5	1000P 50V	C557	ECFR1C473KR	0.047 16V
C25	ECBT1C103MS5	0.01 16V	C305	ECEA1HKA010B	1 50V	C601	ECEA1CKA100B	10 16V
C27	ECBT1H102KB5	1000P 50V	C306	ECEA1AKA101B	100 10V	C602	ECEA1CKA101B	100 16V

Ref. No.	Part No.	Values & Remarks
C652	ECBT1H102KB5	1000P 50V
C654	ECBT1H102KB5	1000P 50V
C656	ECBT1H102KB5	1000P 50V
C657	ECBT1H102KB5	1000P 50V
C800	ECBT1H102KB5	1000P 50V
C801	ECEA0JKA101B	100 6.3V
C802	ECBT1H102KB5	1000P 50V
C804	ECBT1H102KB5	1000P 50V
C805	ECEA1HKA010B	1 50V
C814	ECBT1H102KB5	1000P 50V
C815	ECBT1H102KB5	1000P 50V
C901	ECQV1H104JZ3	0.1 50V
C902	ECQV1H104JZ3	0.1 50V
C903	ECQV1H104JZ3	0.1 50V
C904	ECQV1H104JZ3	0.1 50V
C951	ECBT1H102KB5	1000P 50V
C952	ECEA1EKA4R7B	4.7 25V
		< SERVO >
		RESISTORS
R701	ERJ6GEYJ100	10 1/10W
R702	ERJ6GEYJ471V	470 1/10W
R703	ERJ6GEYJ823	82K 1/10W
R704	ERJ6GEYJ102A	1K 1/10W
R705	ERJ6GEYJ103V	10K 1/10W
R706	ERJ6GEYJ102A	1K 1/10W
R707	ERJ6GEYJ473V	47K 1/10W
R708	ERJ6GEYJ104V	100K 1/10W
R709	ERJ6GEYJ683V	68K 1/10W
R711	ERJ6GEYJ154V	150K 1/10W
R712	ERJ6GEYJ221V	220 1/10W
R714	ERJ6GEY0R00A	0 1/10W
R717	ERJ6GEYJ102A	1K 1/10W
R718	ERJ6GEYJ102A	1K 1/10W

Ref. No.	Part No.	Values & Remarks
R719	ERJ6GEYJ102A	1K 1/10W
R720	ERJ6GEYJ102A	1K 1/10W
R721	ERJ6GEYJ101V	100 1/10W
R722	ERJ6GEYJ563V	56K 1/10W
R723	ERJ6GEYJ182V	1.8K 1/10W
R724	ERJ6GEYJ333V	33K 1/10W
R725	ERJ6GEYJ472V	4.7K 1/10W
R726	ERJ6GEYJ473V	47K 1/10W
R727	ERJ6GEYJ103V	10K 1/10W
R728	ERJ6GEYJ392V	3.9K 1/10W
R730	ERJ6GEYJ331V	330 1/10W
R731	ERJ6GEYJ392V	3.9K 1/10W
R734	ERJ6GEYJ101V	100 1/10W
R735	ERJ6GEYJ101V	100 1/10W
R736	ERJ6GEYJ101V	100 1/10W
R738	ERJ6GEYJ223V	22K 1/10W
R739	ERJ6GEYJ681V	680 1/10W
R741	ERJ6GEYJ562V	5.6K 1/10W
R742	ERJ6GEYJ562V	5.6K 1/10W
R743	ERJ6GEYJ562V	5.6K 1/10W
R744	ERJ6GEYJ103V	10K 1/10W
R745	ERJ6GEYJ155V	1.5M 1/10W
R748	ERJ6GEYJ182V	1.8K 1/10W
R749	ERJ8GEYJ103V	10K 1/8W
		CAPACITORS
C701	ECEA0JKA220	22 6.3V
C702	ECEA1HKA010I	1 50V
C703	ECEA0JKA101I	100 6.3V
C704	ECUZ1E104MBN	0.1 25V
C705	ECEA1HKA010I	1 50V
C706	ECUE1H101JCN	100P 50V
C707	ECUV1E273KBN	0.027 25V
C708	ECUE1H472KBN	4700P 50V

Ref. No.	Part No.	Values & Remarks
C709	ECUE1C473KBN	0.047 16V
C710	ECUE1H152KBN	1500P 50V
C711	ECUZ1E104MBN	0.1 25V
C712	ECUZ1E104MBN	0.1 25V
C713	ECUV1C104MBM	0.1 16V
C714	ECEA0JKA101I	100 6.3V
C715	ECEA0JKA470I	47 6.3V
C716	ECUE1H561KBN	560P 50V
C717	ECUZ1E104MBN	0.1 25V
C718	ECUV1C224KBM	0.22 16V
C721	ECUE1H270JCN	27P 50V
C722	ECUE1H270JCN	27P 50V
C723	ECEA1AKA221I	220 10V
C724	ECUV1C104MBM	0.1 16V
C725	ECUE1H102KBN	1000P 50V
C726	ECUE1H102KBN	1000P 50V
C727	ECEA1HPK010I	1 50V
C728	ECEA1HPK010I	1 50V
C730	ECUZ1E104MBN	0.1 25V
C731	ECEA0JK221I	220 6.3V
C732	ECEA0JK221I	220 6.3V
C733	ECUZ1E104MBN	0.1 25V
C734	ECEA1AKA221I	220 10V
C735	ECUZNE104MBN	0.1 25V
C736	ECUZNE104MBN	0.1 25V
C737	ECUZNE104MBN	0.1 25V
C738	ECUV1C154KBN	0.15 16V
C742	ECUV1E273KBN	0.027 25V
C743	ECUZNE104MBN	0.1 25V
C744	ECUE1E822KBN	8200P 25V
C745	ECUE1C473MBN	0.047 16V
C746	ECUE1H050DCN	5P 50V
C747	ECUE1H222KBN	2200P 50V
C748	ECUV1H471KBM	470P 50V

PACKING MATERIALS & ACCESSORIES

Notes: * Important safety notice:

Components identified by Δ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.

When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

* 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.

* The "(SF)" mark denotes the standard part.

* [M] Indicates in the Remarks columns indicates parts supplied by MESA.

Ref No.	Part No.	Part Name & Description	Remarks
PACKING MATERIALS			
P1	RPGX0131	GIFT BOX	[M] (E, EG)
P1	RPGX0132	GIFT BOX	[M] (EB)
P2	RPH3SZA	MIRAMAT SHEET	[M]
P3	RPNX0037	POLYFOAM	[M]
P4	RPQX0015	PAD	[M] (EB)

Ref No.	Part No.	Part Name & Description	Remarks
ACCESSORIES			
A1	RFKSXD600EK	INSTR MNL ASS'Y	[M] (E)
A1	RQT2296-E	INSTR MNL	[M] (EG)
A1	RQT2297-B	INSTR MNL	[M] (EB)
A2	RJA0019-2K	AC CORD	(E, EG) (SF) Δ
A2	VJA0733	AC CORD	(EB) (SF) Δ