Order No. MD0301013C2

Service Manual

Portable Stereo CD System

COMPACT disc DIGITAL AUDIO

RX-D21E
RX-D21EB
RX-D21EG

Colour

(A) ... Blue Type

(S) ... Silver Type

Specification

■ RADIO

Frequency Range	
FM	87.50-108.00 MHz (50 kHz steps)
AM	522-1629 kHz (9 kHz steps)

■ TAPE RECORDER

Track System	4 track, 2 channel, stereo
Monitor system	Variable sound monitor
Recording system	AC bias
Erasing system	Multi Pole magnet
Frequency range	
Normal position	50 ~ 12000 Hz

■ CD PLAYER

Sampling frequency	44.1 kHz
Decoding	16 bit linear
Beam source	Semiconductor laser (wavelength 780 nm)
No. of channels	2 channel, stereo
Wow and flutter	Less than possible measurement data
D/A converter	1 bit DAC

■ GENERAL

Power Requirement	
AC	230-240 V, 50 Hz
	Power Consumption : 11 W
Battery	9 V (six R20/LR20, D, UM-1 batteries)
	● Do not use rechargeable type batteries.
Memory back-up	6 V (four R6/LR6, AA, UM-3 batteries)
	● Do not use rechargeable type batteries.
Speakers	
Full range	10 cm 4Ω x 2
Jacks	
Output	Phones : 3.5 mm stereo (32Ω)
Dimensions (W x H x D)	420 x 167 x 275 mm
Mass	3.4 kg without batteries

Notes:

1. Specifications are subject to change without notice.
2. Mass and dimensions are approximate.

Panasonic

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C120, C220, C317 through a 10 Ω, 5 W resistor to ground. DO NOT SHORT-CIRCUIT DIRECTLY (with a screw driver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid over current.

Current consumption at AC 230 V, 240V, 50 Hz in NO SIGNAL mode should be ~45 mA respectively.

2 Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.
- Stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance ofthe amplifier are used.

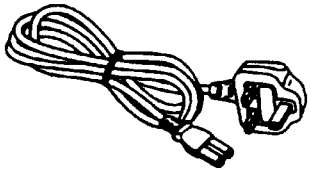
If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

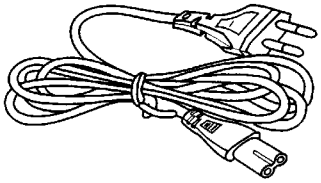
Note:

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

3 Accessories



AC Main Lead (EB).....1 pc



AC Main Lead (E/EG).....1 pc

4 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 (FFC board).
  3. Take care not to apply excessive stress to the flexible board (FFC board). When removing or connecting the short pin, finish the job in as short time as possible.
  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.

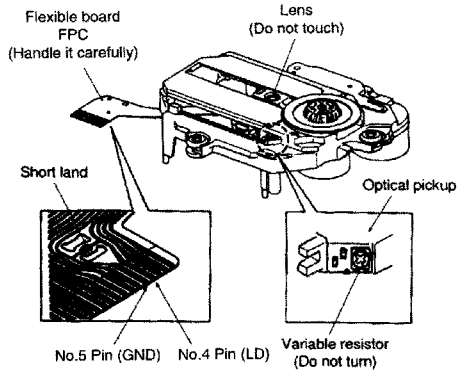
     Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is place, and ground the sheet.

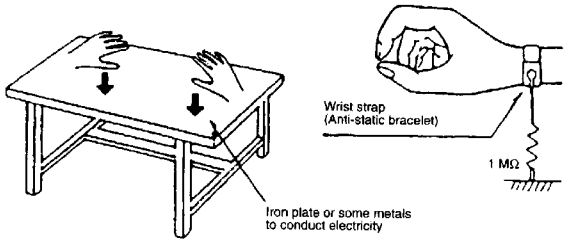
Caution:

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 when replacing the Traverse Deck

The traverse deck has a short point shorted with solder to protect the laser diode against electrostatics breakdown. Be sure to remove the solder from the short point before making connections.





5 Precaution of Laser Diode

CAUTION:

This product utilizes a laser diode with the unit truned “ON”, invisible laser radiation is emitted from the pick up lens.
Wavelength : 780 nm
Maximum output radiation power from pick up : 100µW/VDE
Laserradiation from pick up unit 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 pick up 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:

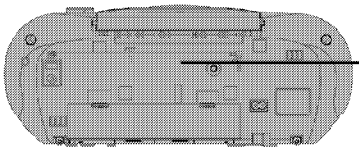
Dieses Produkt enthält eine Laserdiode. Im enigeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit abgestrahlt.
Wellenlänge : 780nm
Maximale Strahlungsleistung der Lasereinheit : 100µW/VDE
DieStrahlung an der Lasereinheit ist ungefährlich, wenn folgende Punkte beachtet werden:

1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Den werkseitig justierten Einstellregler der Lasereinhit 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.

CAUTION!
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

■ Use of Caution Labels



(Back of product)

LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

DANGER	INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. AVOID DIRECT EXPOSURE TO BEAM.
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNIKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO!	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.
ADVARSEL	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET UND SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.

Inside of product
Tuotteen sisällä
Produktets innside

This product may receive radio interference caused by mobile telephones during use. If such interference is apparent, please increase separation between the product and the mobile telephone.

6 Caution for AC Mains Lead

(For "EB" area code model only.)

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 mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As these colours 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 which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use

Remove the connector cover.

How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

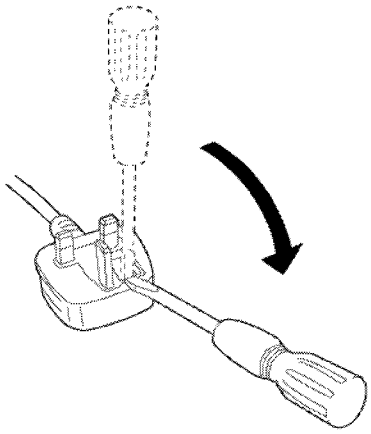
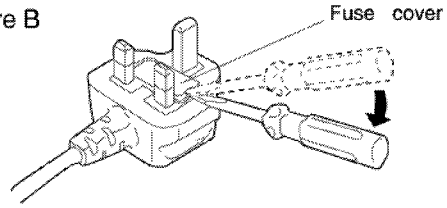


Figure B



2. Replace the fuse and close or attach the fuse cover.

Figure A

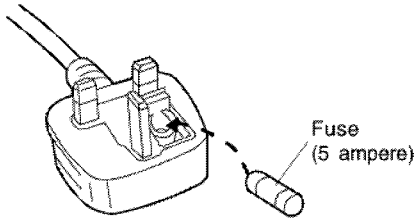
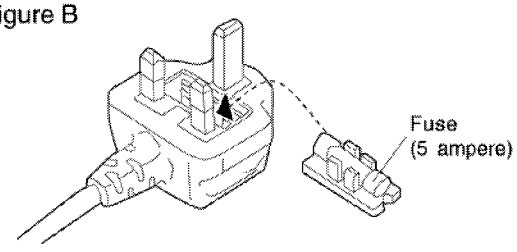
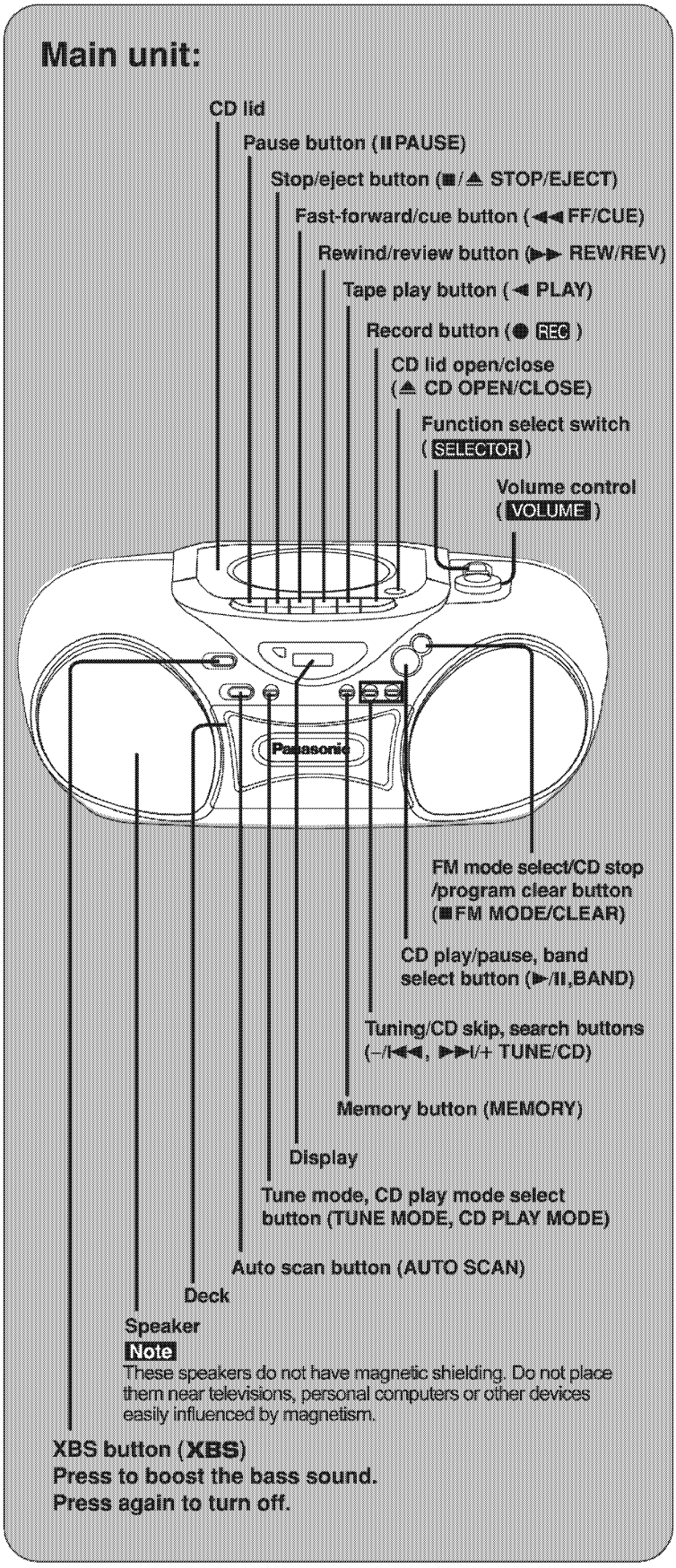


Figure B



7 Operation Procedures

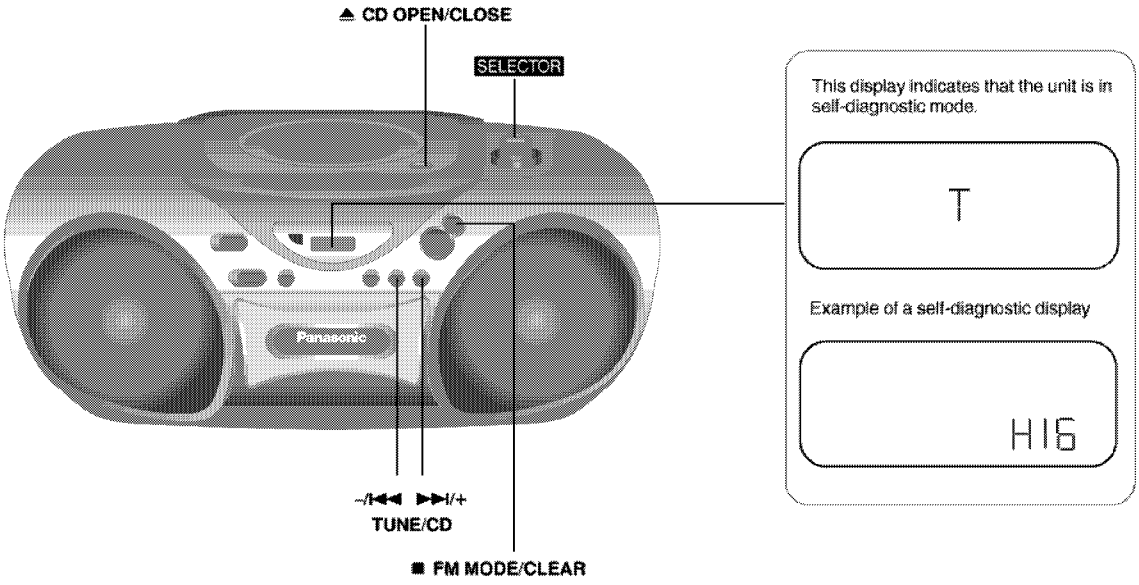


8 Self-Diagnostic Functions

8.1. Setting of the Self-Diagnostic Mode

1. Switch the SELECTOR to CD and set to TAPE STOP state. (CD PLAY→STOP)
2. Press the ■/CLEAR for the first two seconds and followed by the FAST FORWARD keys for another two seconds without releasing the ■/CLEAR key, it shall enter into the Self-Diagnostic mode.
3. At the state of [T] display, operate as follows:
   - Open the CD lid and close it right away.
   - Start recording TAPE, and STOP it at once.
4. Press ■/CLEAR key.
   - Self diagnostic results, i.e. the memorized errors during actual operations and the result of above-mentioned operation shall be displayed alternately.
   - If there is no error, the aforementioned display [T], shall be kept.
   - If the operation in the above mentioned in 4 is made without executing the procedure in 3, [H16] and [F69] shall be displayed.

8.2. Display Location



8.3. Display Content

No.	Abnormal Items	Error Display	Method of detection
1	CLOSE SW abnormal	H16	Detect error during closing operation and memorised it as an error.
2	REST SW abnormal	F15	Under normal operation (Self-Diagnostic Mode inclusive), this error occurs when the REST SW ON is not detected within the specified time (5000 ms) and shall be memorised.
3	Transmission error between CD servo LSI and micon	F26	Under normal operation (Self-Diagnostic Mode inclusive), this error occurs when the selection is set to CD and SENSE ='H' is detected and SENSE ='L' is notdetected within a fail-safe time (20 ms) after system command transmission was sent.

9 Operation Checks and Component Replacement Procedures

"ATTENTION SERVICER"

Some chassis components maybe have sharp edges. Be careful when diassembling and servicing.

1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
2. For reassembly after operation checks or replacement, reverse the respective procedures.
   Special reassembly procedures are described only when required.
3. Select items from the following index when checks or replacement are required.
4. Refer the Parts No. on the page of "Main component Replacement Procedures", if necessary.

Content

- **Disassembly Procedure for each major P.C.B.**

9.1.1. Checking for the Tuner P.C.B.
9.1.2. Checking for Deck P.C.B.
9.1.3. Checking for Main PCB and CD Servo P.C.B.
9.1.4. Replacement of Pinch Roller, Eraser Head, Record / Playback Head.
9.1.5. Replacement of Motor, Main Belt, Forward Belt.
9.1.6. Replacement of Traverse Deck.
9.1.7. Replacement of CD Cover.
9.1.8. Replacement of Cassette Cover.
9.1.9. Replacement of Handle.
9.1.10. Troubleshooting for Cassette Tape Entanglement.

Warning:

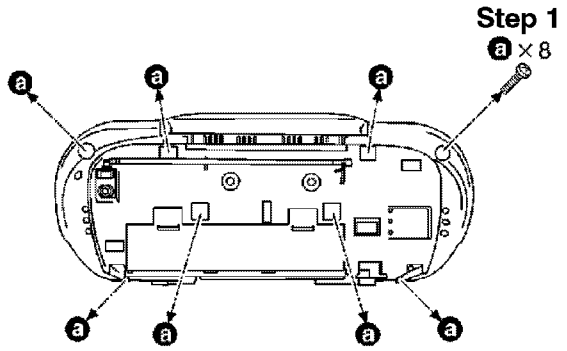
This product uses a laser diode. Refer to "Precaution of Laser Diode".

ACHTUNG:

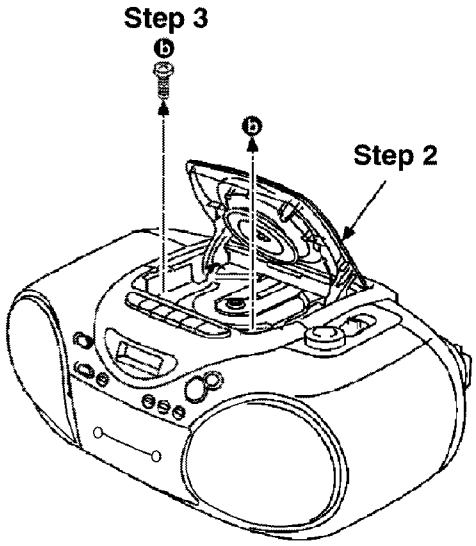
Die Lasereinheit nicht zerlegen.
Die Lasereinheit darf nur gegen eine vom Hertsteller spezifizierte Einheit ausgetauscht werden.

9.1. Disassembly Procedure for each major P.C.B.

9.1.1. Checking for the Tuner PCB

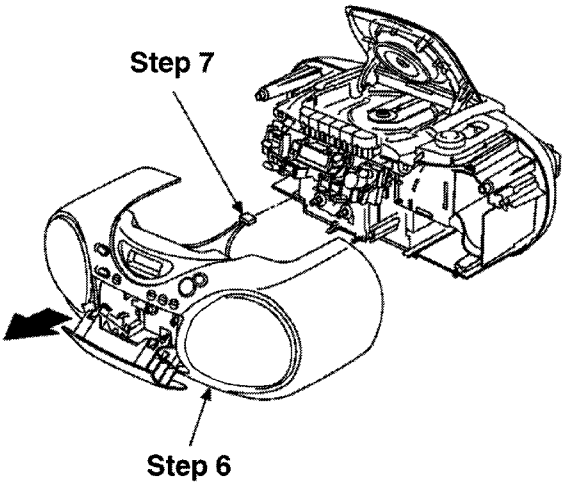


Step 1 : Remove all the screws.



Step 2 : Open the CD Lid.

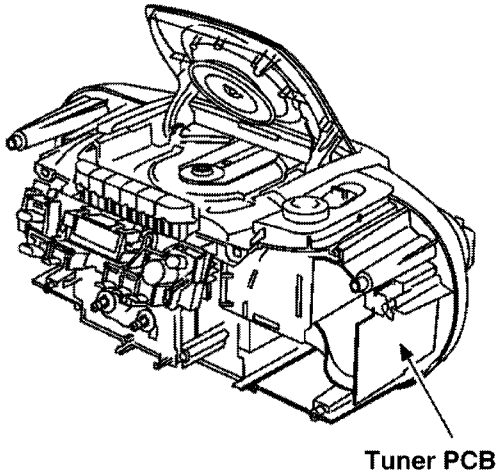
Step 3 : Remove the screws.

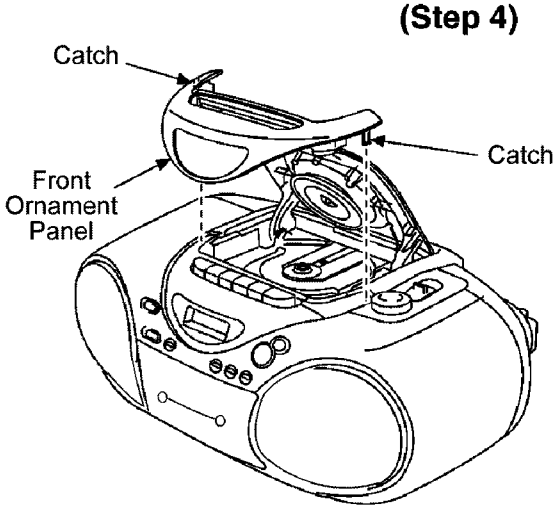


Step 6 : Pull the front cabinet (unit).

Step 7 : Release the connector.

• Checking for Tuner PCB as below shown.

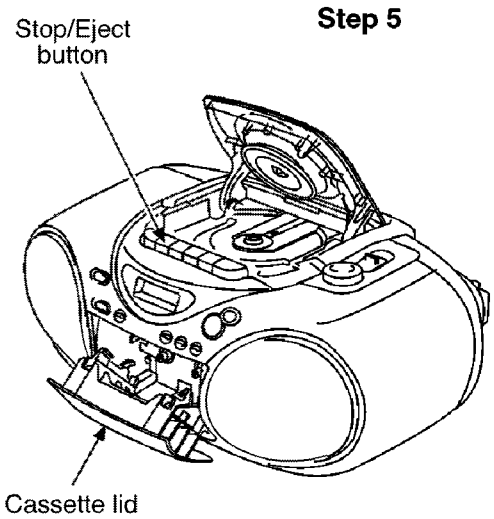




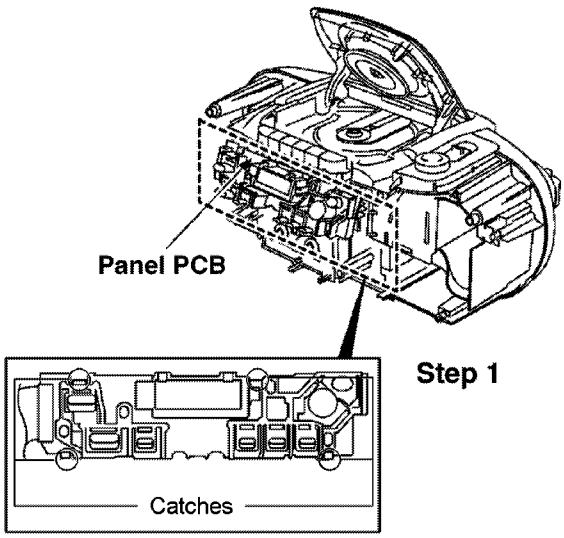
Step 4 : Release 2 catches to remove the front ornament panel.

9.1.2. Checking for Deck PCB

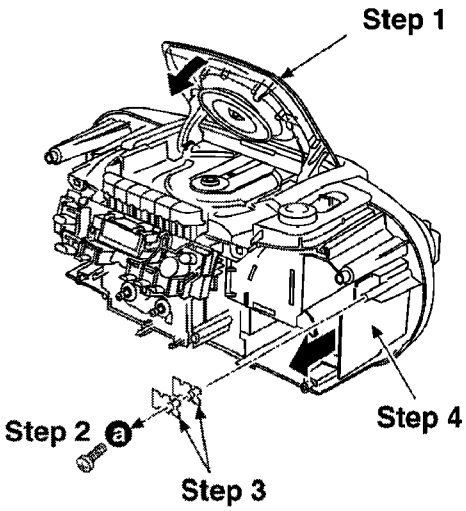
• Follow steps 1 to 7 described in item 9.1.1



Step 5 : Press Stop/Eject button to open the cassette.



Step 1 : Release four catches to remove the Panel PCB.

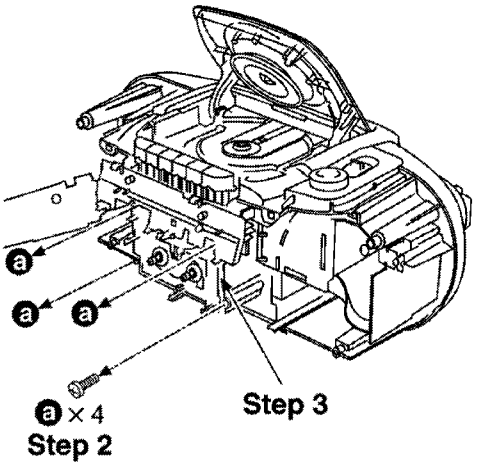


Step 1 : Close the CD Lid.

Step 2 : Remove the screw.

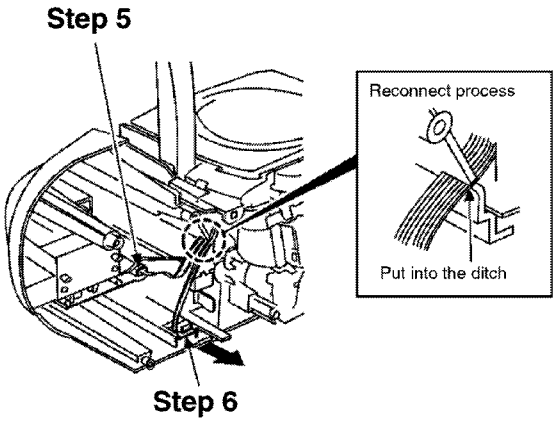
Step 3 : Remove the hold panel.

Step 4 : Pull the Tuner PCB as arrow shown.



Step 2 : Remove the screws.

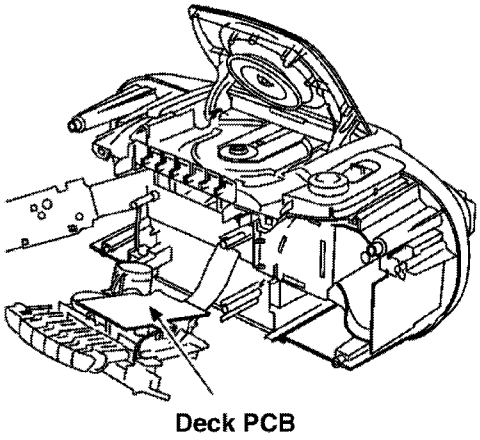
Step 3 : Remove the cassette deck.

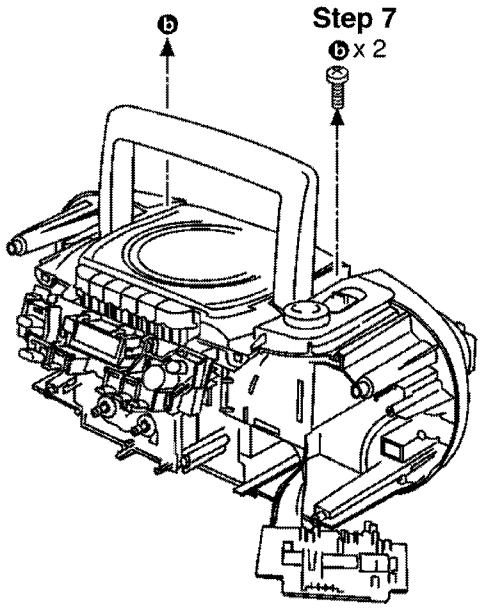


Step 5 : Release the connector CP301.

Step 6 : Pull the connector PCB.

- Checking for Deck PCB as shown below.

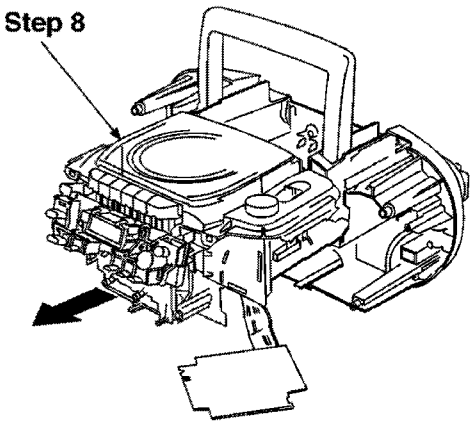




9.1.3. Checking for Main PCB and CD Servo PCB

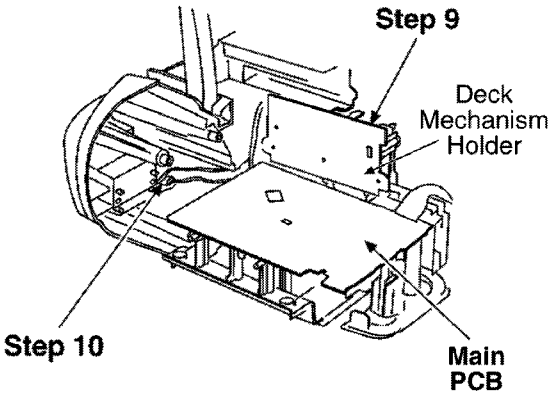
- Follow steps 1 to 7 described in item 9.1.1

Step 7 : Remove the screws.



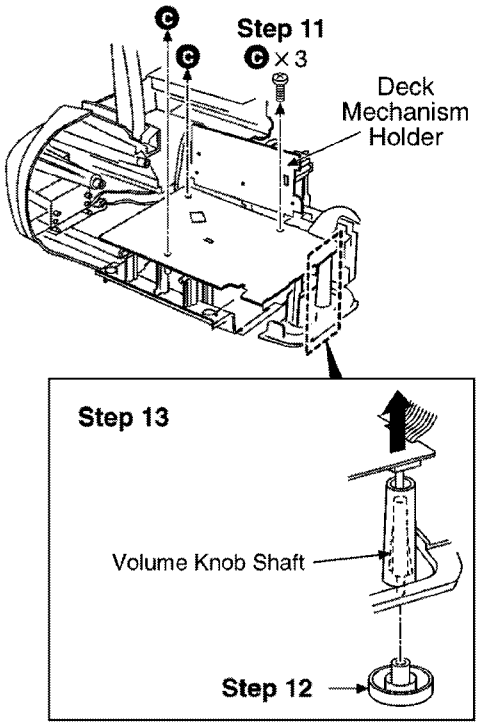
Step 8 : Pull the Main unit.

• Checking for Main PCB as shown below.



Step 9 : Turn over the Main unit.

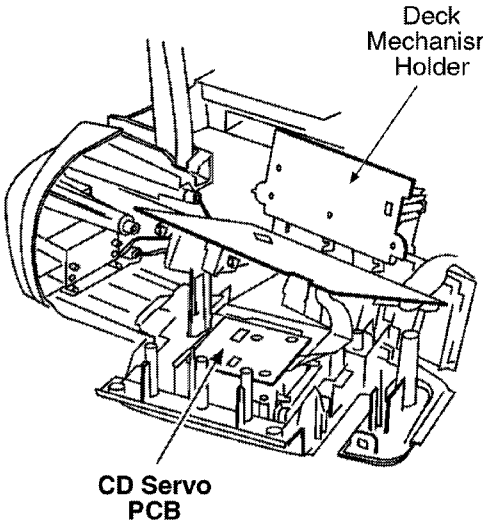
Step 10 : Reconnect the connector (CP301).



Step 11 : Remove the screws.

Step 12 : Pull out the volume knob.

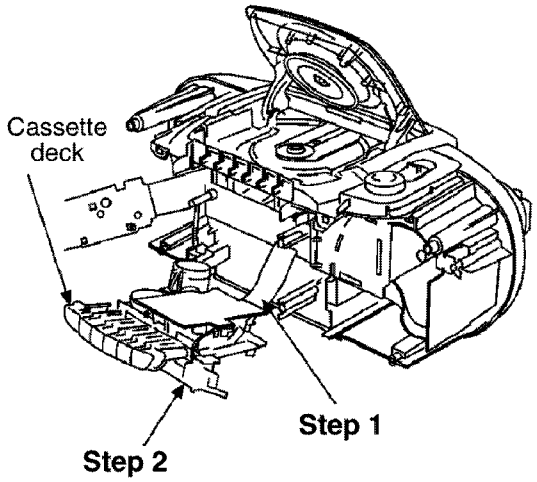
Step 13 : Lift the Main PCB to pull out the volume Knob Shaft.



9.1.4. Replacement of Pinch Roller, Eraser Head, Record / Playback Head

• Follow steps 1 to 7 described in item 9.1.1

• Follow steps 1 to 3 described in item 9.1.2

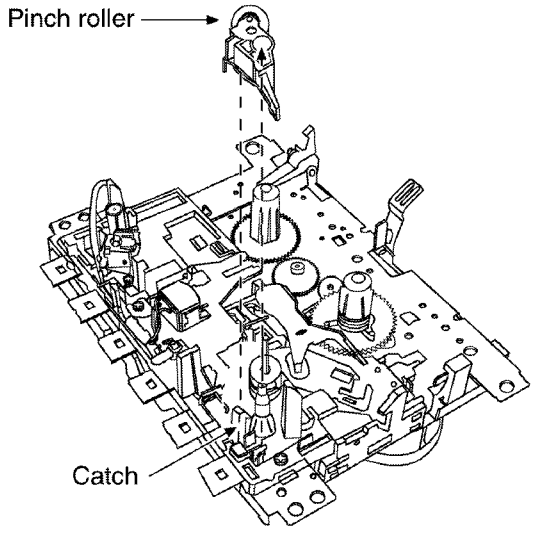


Step 1 : Remove the parallel wire from the connector.

Step 2 : Remove the circuit board holder.

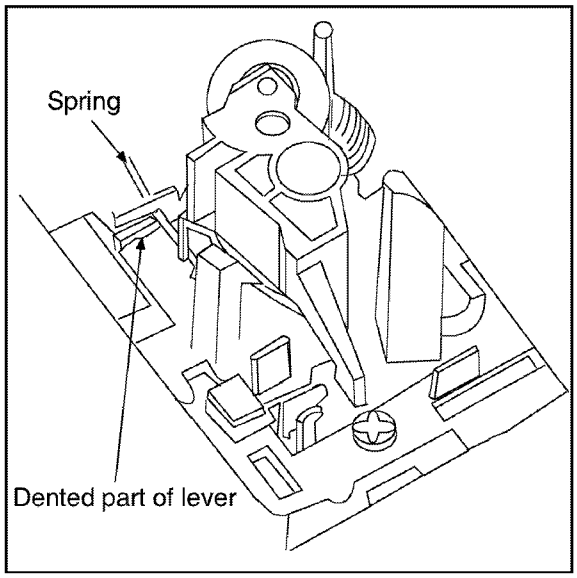
● Replacement of Pinch Roller

Remove a catch to remove the pinch roller upward.



Notes for pinch roller installation

The spring of the pinch roller should fit in the dented part of the lever.

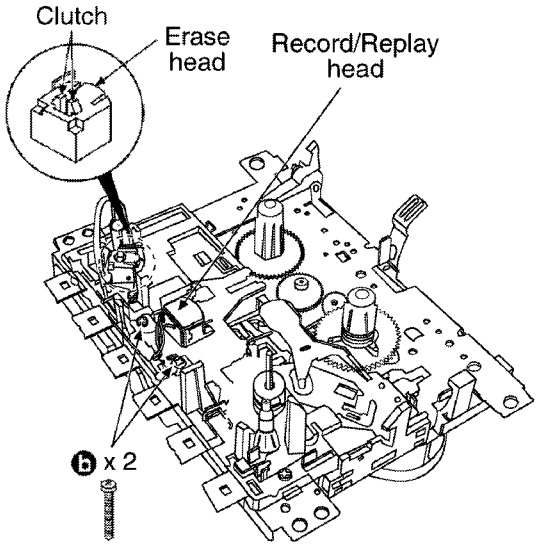


● Replacement of Record/Replay Head

Remove the two screws (b) and remove the record/replay head.

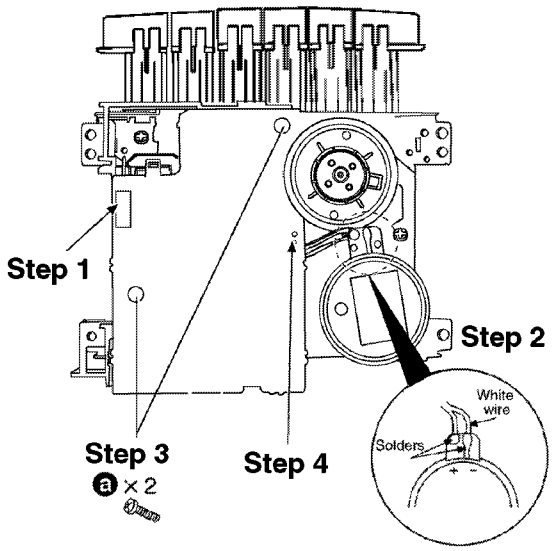
● Replacement of Erase Head

Remove the two catches and remove the erase head.



9.1.5. Replacement of Motor, Main Belt, Forward Belt

- Follow steps 1 to 7 described in item 9.1.1
- Follow steps 1 to 3 described in item 9.1.2
- Follow steps 1 to 2 described in item 9.1.4

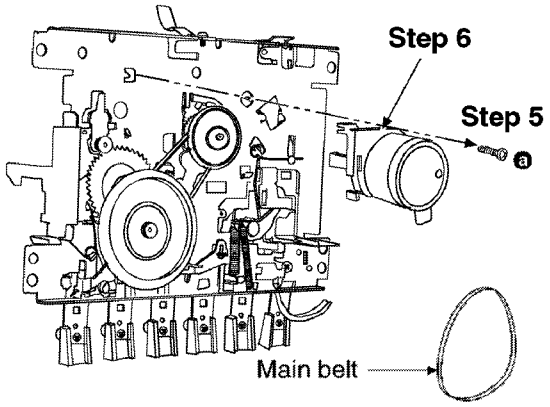


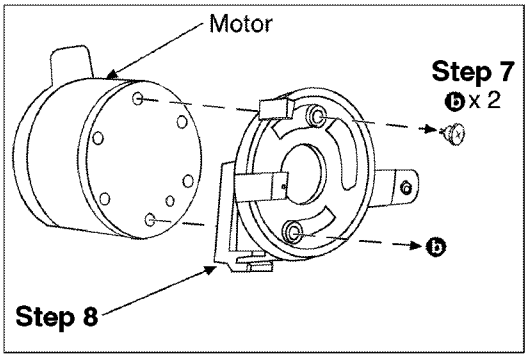
Step 1 : Remove the connector.

Step 2 : Remove the solders of the lead wire.

Step 3 : Remove the screws.

Step 4 : Remove the motor control circuit board.



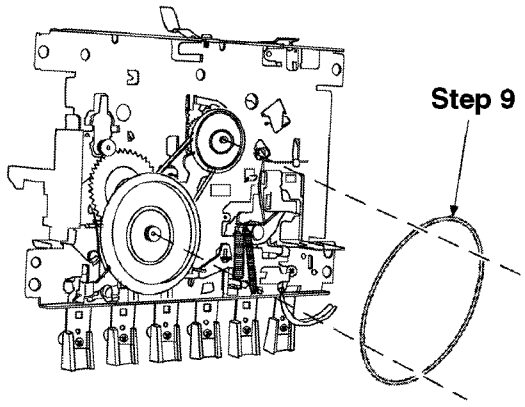


Step 5 : Remove the screw.

Step 6 : Remove the motor and the motor angle.

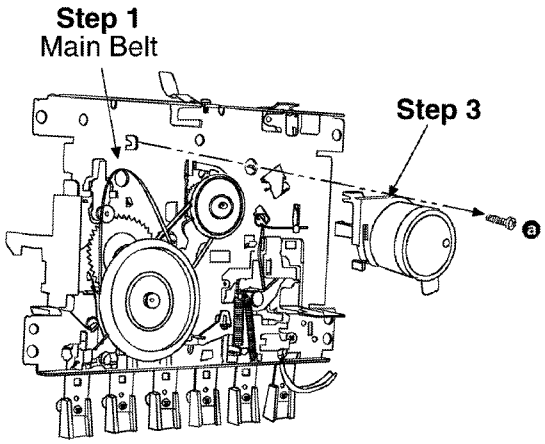
Step 7 : Remove the screws.

Step 8 : Remove the motor angle.



Step 9 : Remove the forward belt.

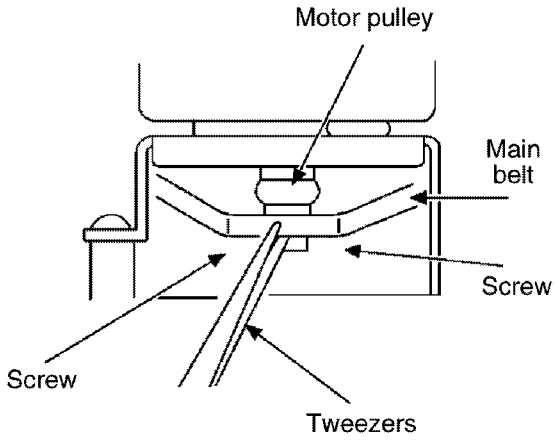
9.1.5.1. Installation of Main Belt



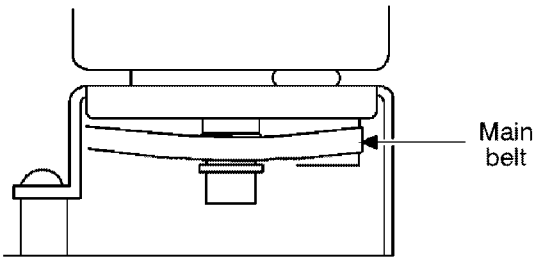
Step 1 : Position a main belt as picture shown temporarily.

Step 2 : Install the motor and the motor angle to the mechanism unit.

Step 3 : Fasten with a screw.

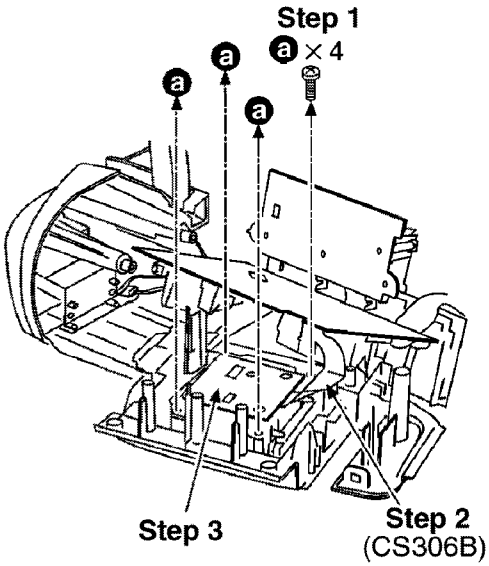


Step 4 : Hang the main belt to the motor pulley.



9.1.6. Replacement of Traverse Deck

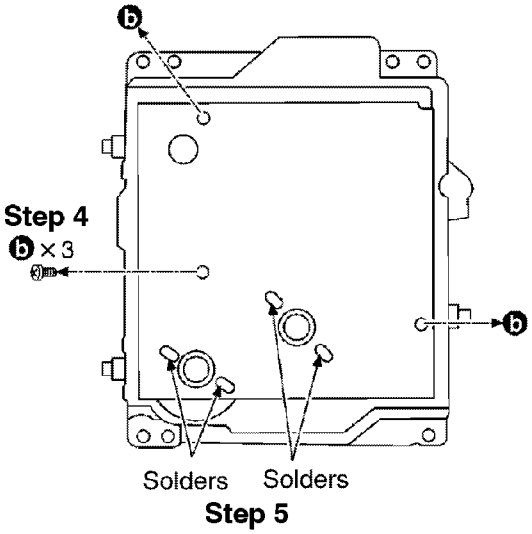
- Follow steps 1 to 7 described in item 9.1.1
- Follow steps 1 to 13 described in item 9.1.3



Step 1 : Remove the screws.

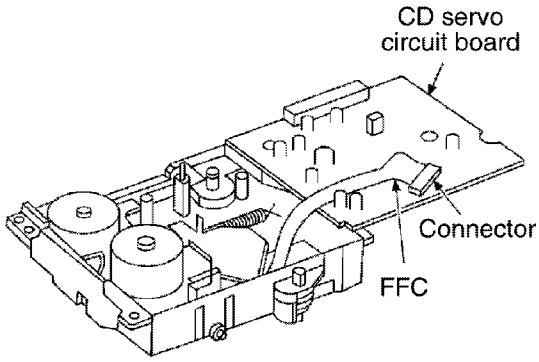
Step 2 : Pull out FFC (CS306B).

Step 3 : Remove the traverse deck.

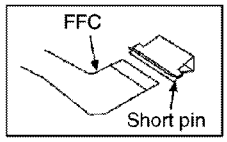


Step 4 : Remove the screws.

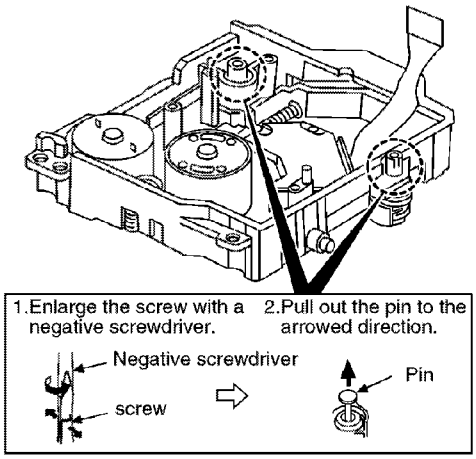
Step 5 : Remove the four solders on the motor terminals.



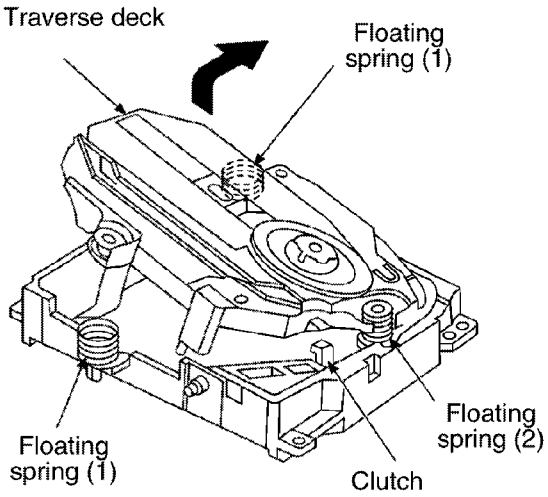
(Note)
Insert a short pin to the FFC of the optical pickup. [Refer to "Notes to Traverse Deck (Optical Pickup) Handling" for details.]



Step 6 : Remove FFC from the connector then remove the CD servo circuit board.



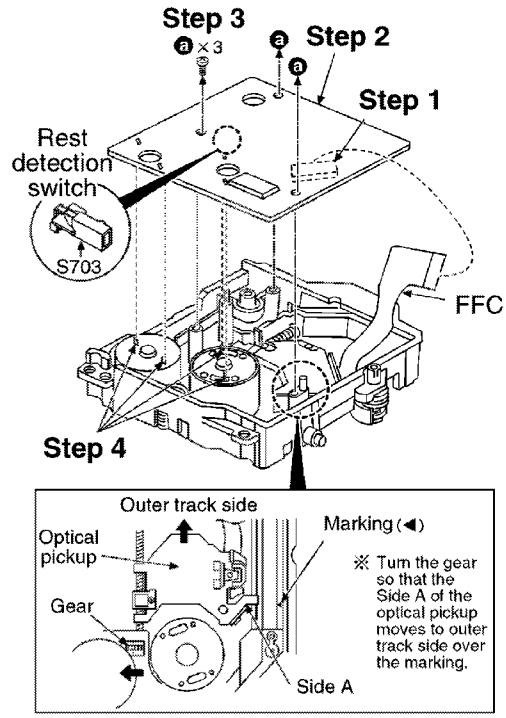
Step 7 : Remove the two pins.



(Note)
Do not lose the three floating springs that come off when the traverse deck is removed.

Step 8 : Remove the clutch then remove the traverse deck.

9.1.6.1. Installation of CD Servo Circuit Board



(Note)
Be sure to move the optical pickup to outer track side over the making. [Otherwise, the rest detection switch (S701) located on the CD servo circuit board could be damaged.]

Step 1 : Connect FFC to the connector.

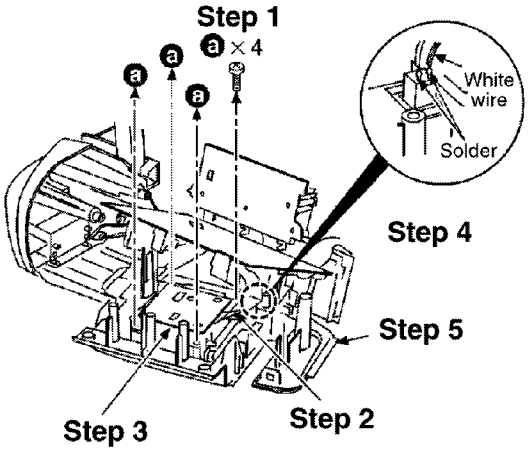
Step 2 : Install a CD servo circuit board.

Step 3 : Remove the screws.

Step 4 : Solder these parts.

9.1.7. Replacement of CD Cover

- Follow steps 1 to 7 described in item 9.1.1
- Follow steps 1 to 13 described in item 9.1.3



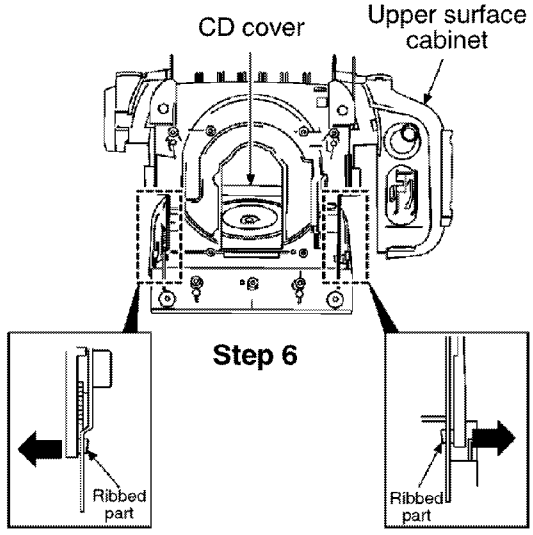
Step 1 : Remove the screws.

Step 2 : Pull out FFC.

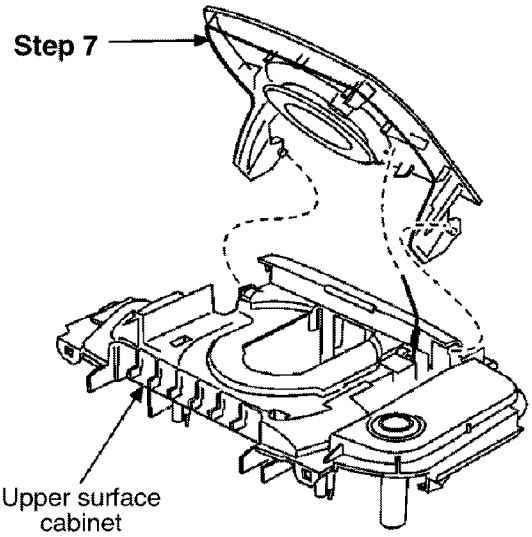
Step 3 : Remove the traverse deck.

Step 4 : Remove the solder on the lead wire.

Step 5 : Remove the upper surface cabinet.



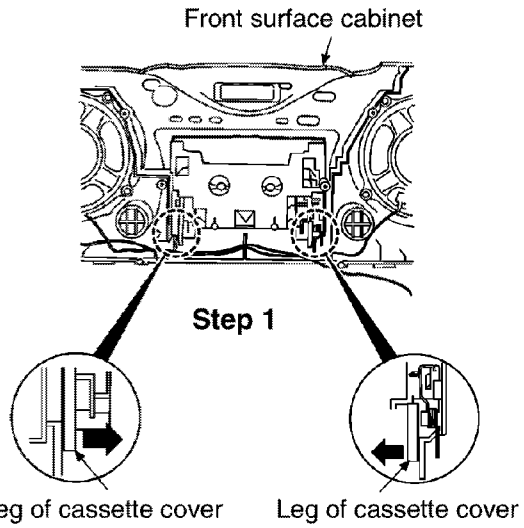
Step 6 : Pull the ribbed parts of each side toward the arrowed direction with the CD cover half-open.



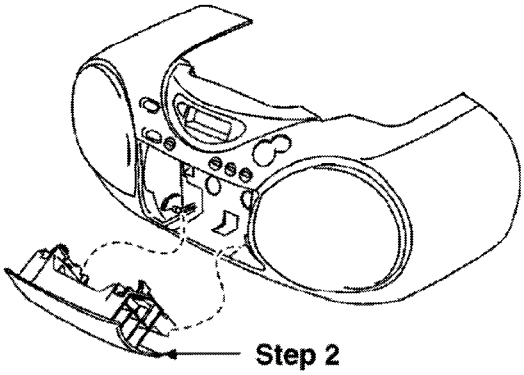
Step 7 : Remove the CD cover from the upper surface cabinet.

9.1.8. Replacement of Cassette Cover

- Follow steps 1 to 7 described in item 9.1.1

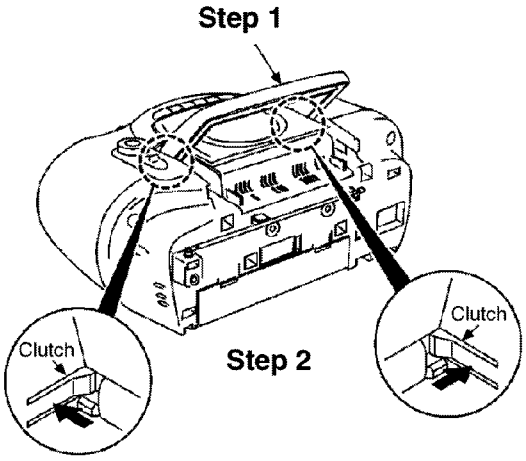


Step 1 : Pull the both legs of the cassette cover to the arrowed direction.



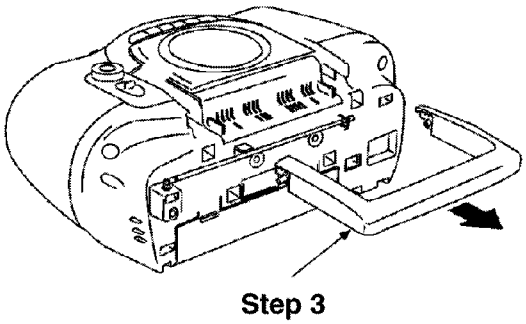
Step 2 : Remove the cassette cover.

9.1.9. Replacement of Handle



Step 1 : Tilt the handle slightly.

Step 2 : Remove both clutches.

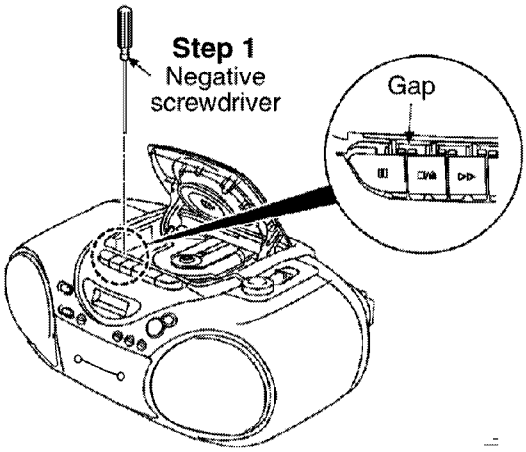


Step 3 : Hold down and pull out the handle.

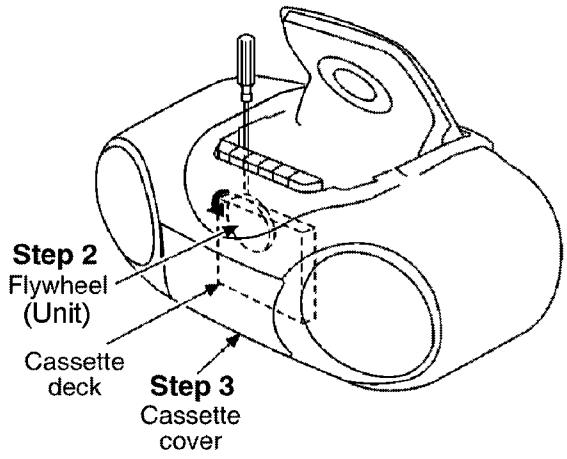
9.1.10. Troubleshooting for Cassette Tape Entanglement

- Follow steps 1 to 4 described in item 9.1.1

If the tape is tangled in the capstan, pinch roller, etc. during replay or recording and the cassette tape is stuck in the unit, turn the flywheel to the arrowed direction to take out the tangled tape.



Step 1 : Insert a negative screwdriver with a narrow end into a gap of the cassette button.



Step 2 : Turn the flywheel.

Step 3 : Open the cassette cover and remove the tape.

10 Schematic Diagram

(All schematic diagrams may be modified at any time with the development of new technology.)

Notes:

S702	Interlock Switch
S703	Rest Switch
SW302	Function Switch
SW601	Auto Scan Switch
SW602	XBS/TONE/HES Switch
SW603	Play Mode Switch
SW604	Memory Switch
SW605	REV Skip Switch
SW606	FWD Skip Switch
SW607	Play/Pause Switch
SW608	CD Stop Switch
SW1001	Record Switch
VR301	Volume VR

- 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 waveformsdepending upon the internal impedance of the tester or the measuring unit.

No mark	...Playback	< >	...FM
(( ))	...CD	( )	...AM

- **Importance safety notice:**

  Components identifed by ⚠ 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. Whenreplacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

Caution!

IC, LSI and VLSI are sensitive to static electricity.

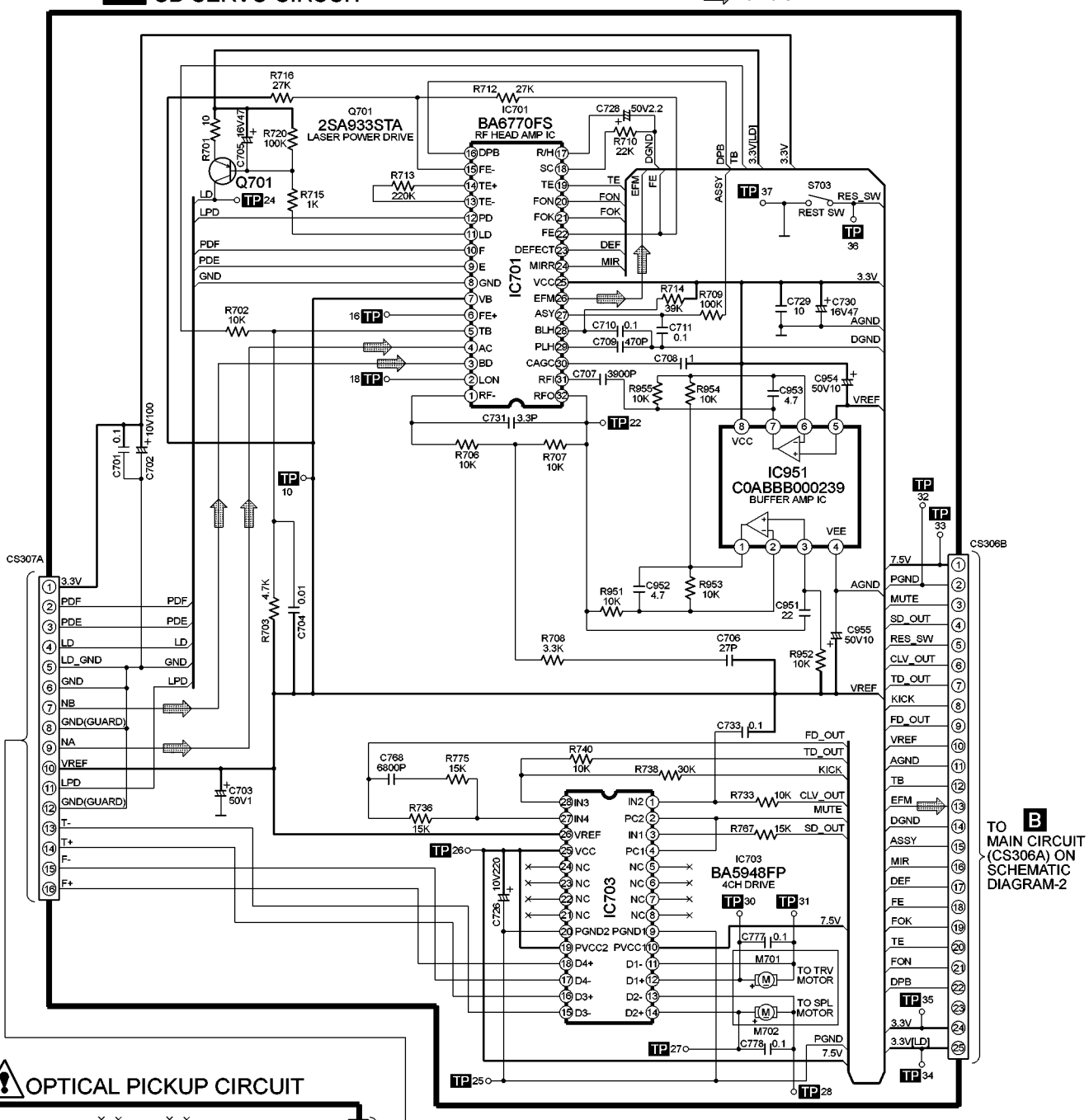
Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.
- Put a conductive mat on the work table.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

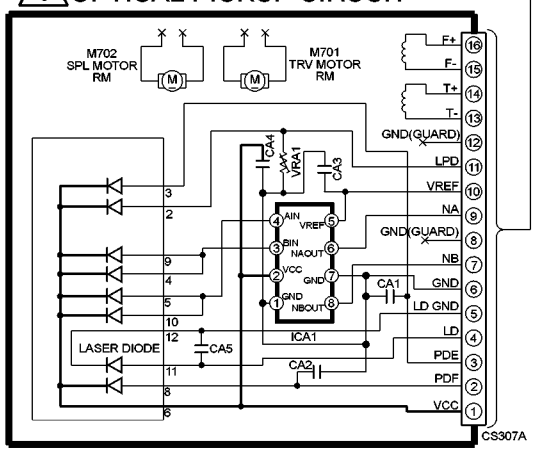
SCHEMATIC DIAGRAM-1

A CD SERVO CIRCUIT

——— : +B SIGNAL LINE ⇨ : CD SIGNAL LINE



OPTICAL PICKUP CIRCUIT

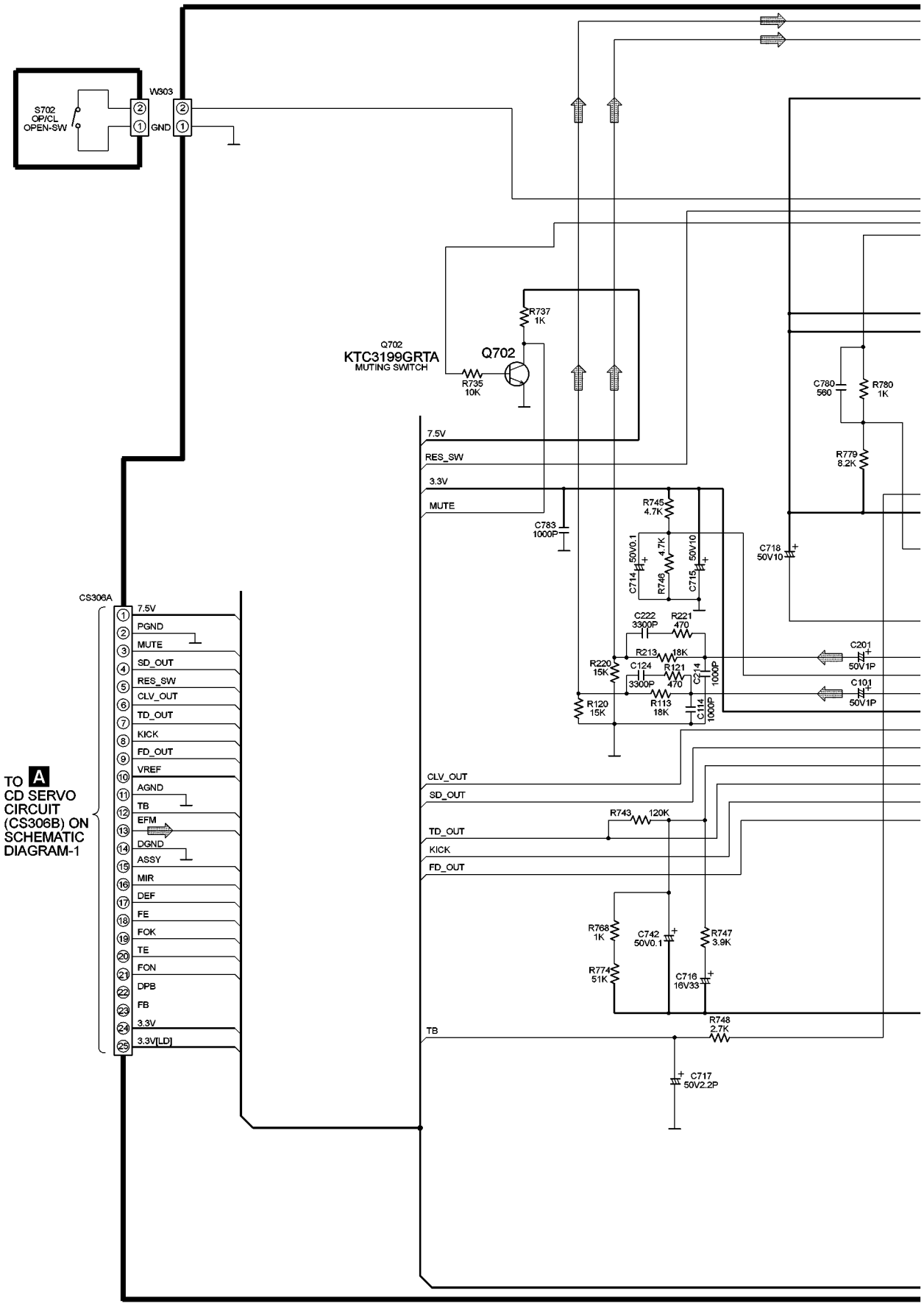


SCHEMATIC DIAGRAM-2

B MAIN CIRCUIT

—— : +B Signal line

⇨ : CD Signal line

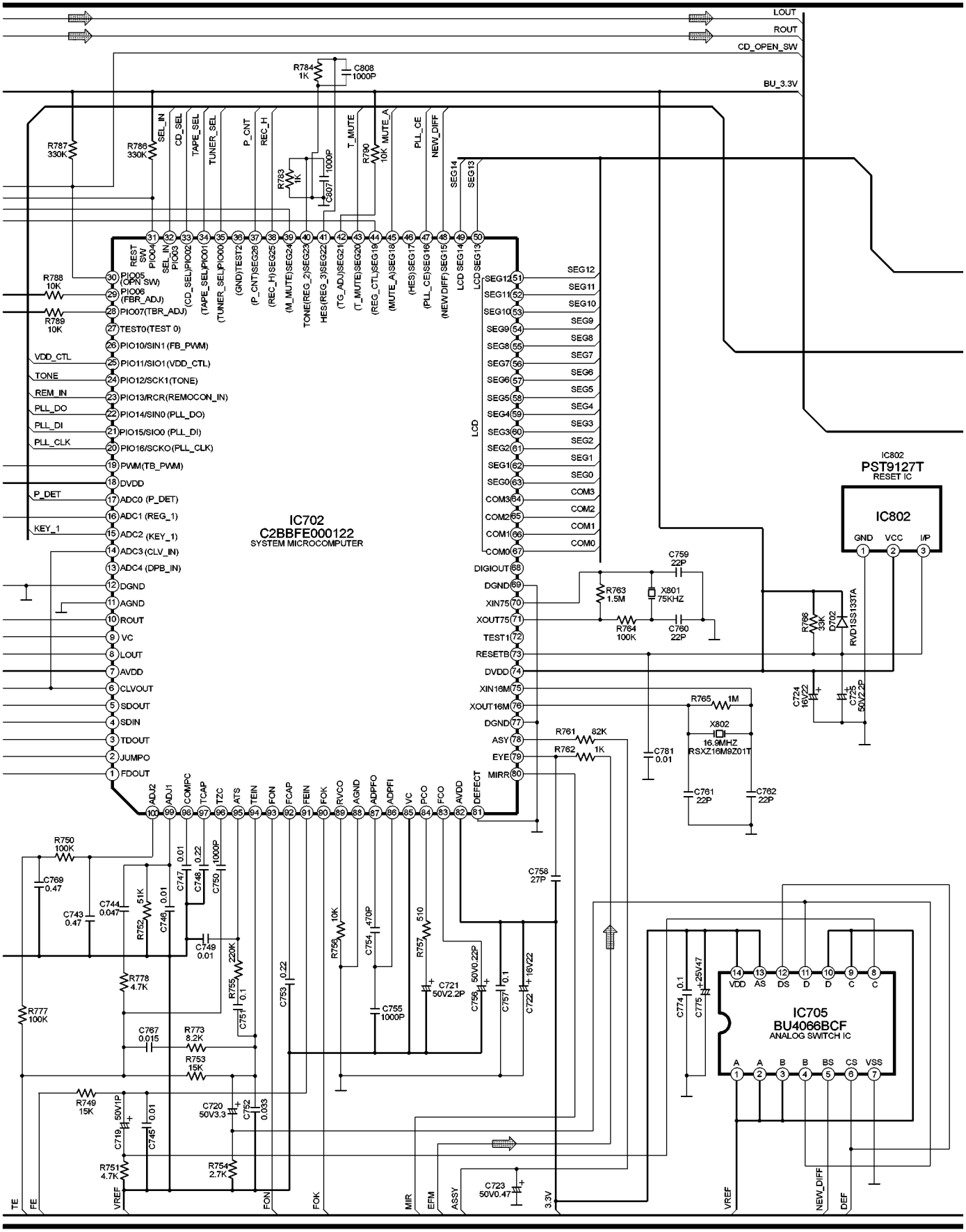


SCHEMATIC DIAGRAM-3

B MAIN CIRCUIT

: +B Signal line

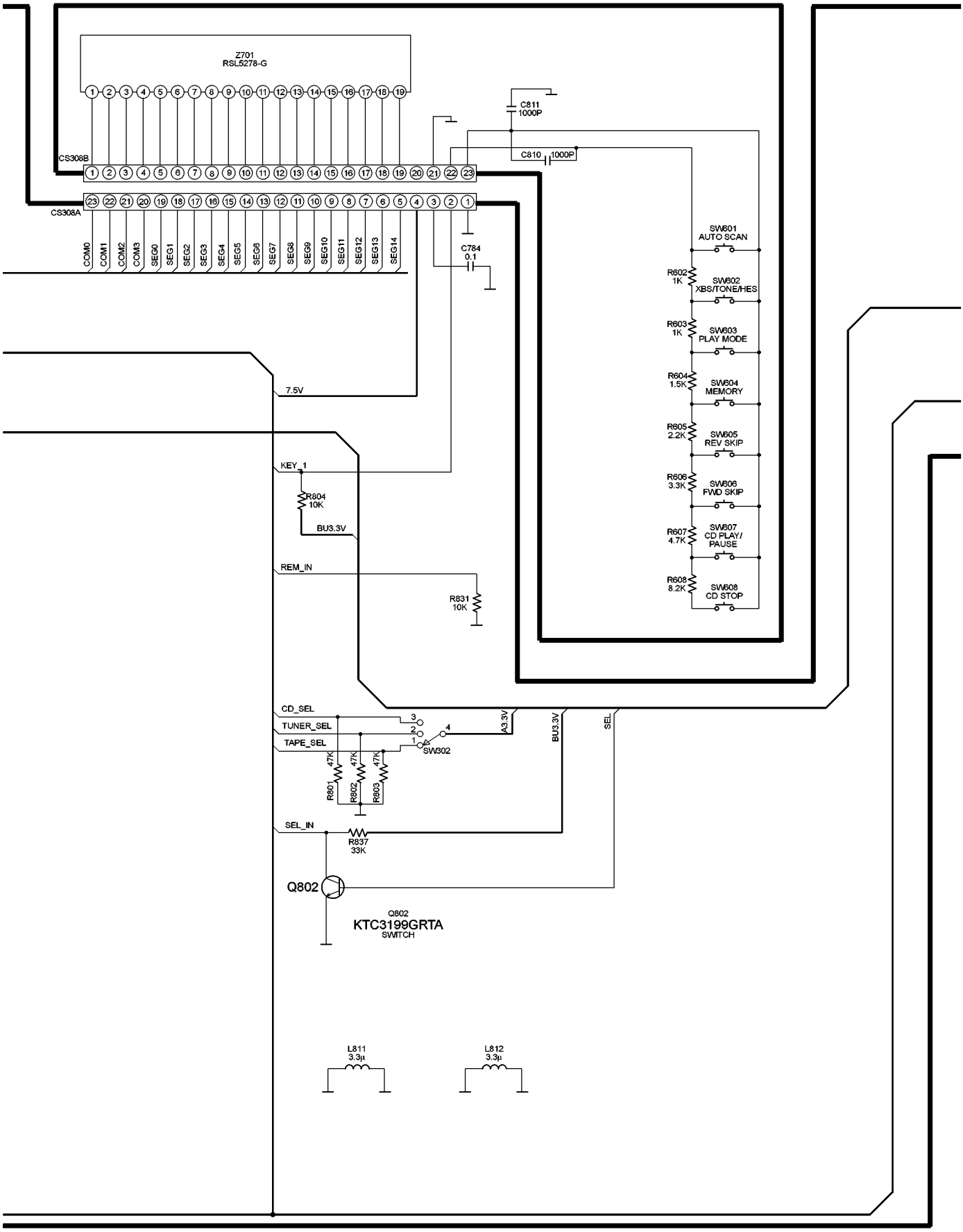
: CD Signal line



SCHEMATIC DIAGRAM-4

C PANEL CIRCUIT

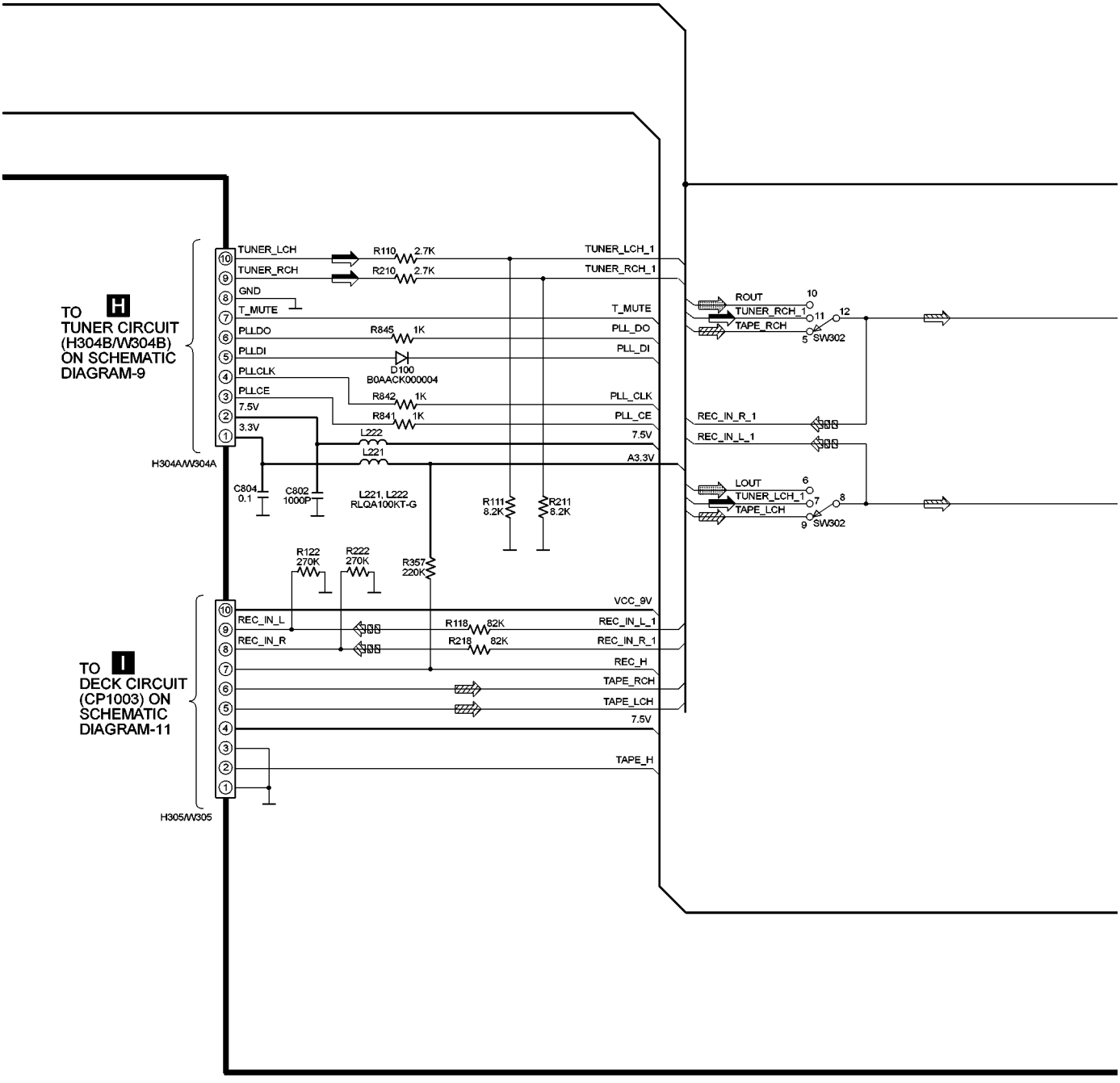
—— : +B Signal line



SCHEMATIC DIAGRAM-5

B MAIN CIRCUIT

: Main Signal line
: CD Signal line
: AM/FM Signal line
: Playback Signal line
: Rec Signal line
: +B Signal line

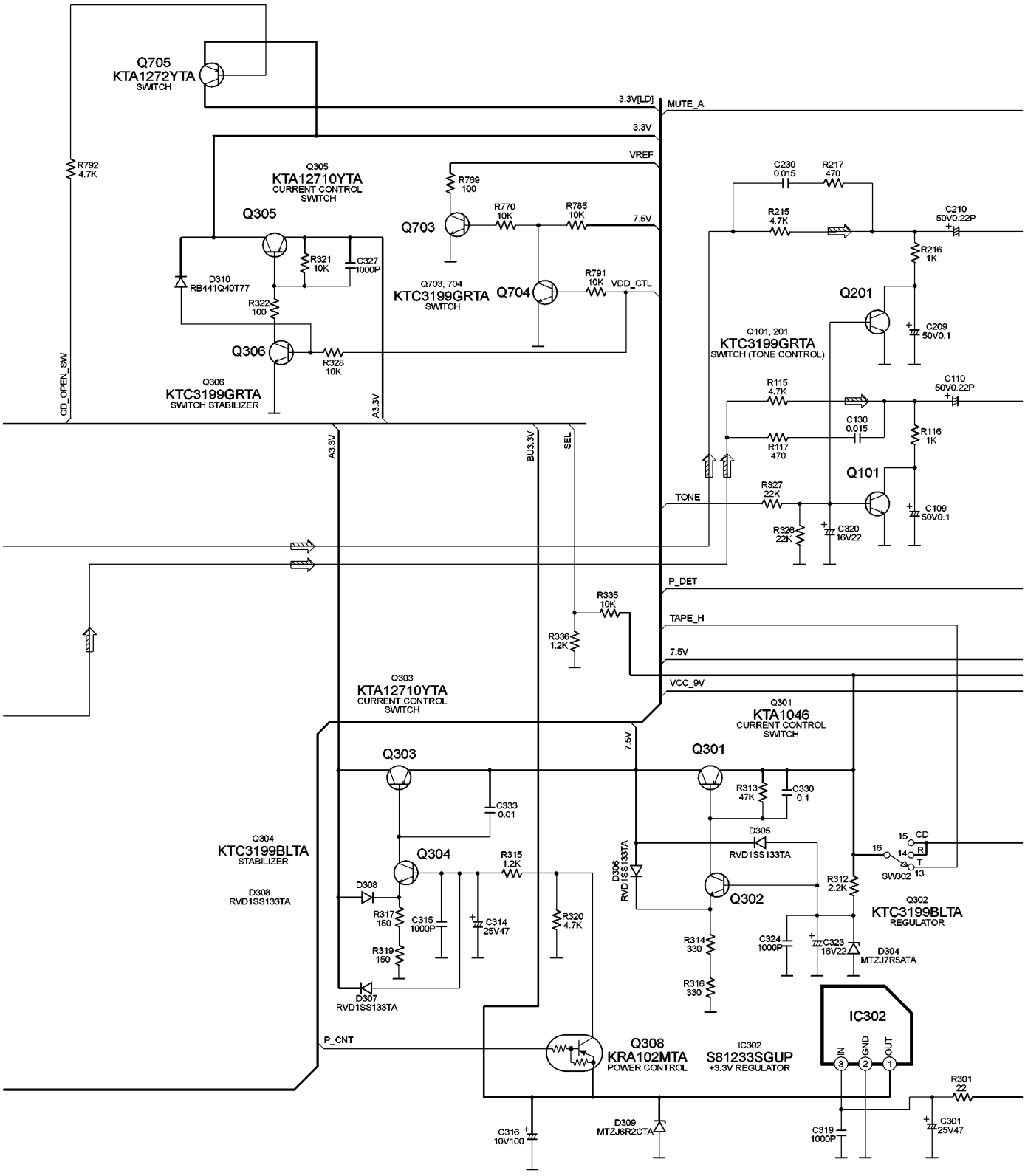


SCHEMATIC DIAGRAM-6

B MAIN CIRCUIT

: Main Signal line

: +B Signal line

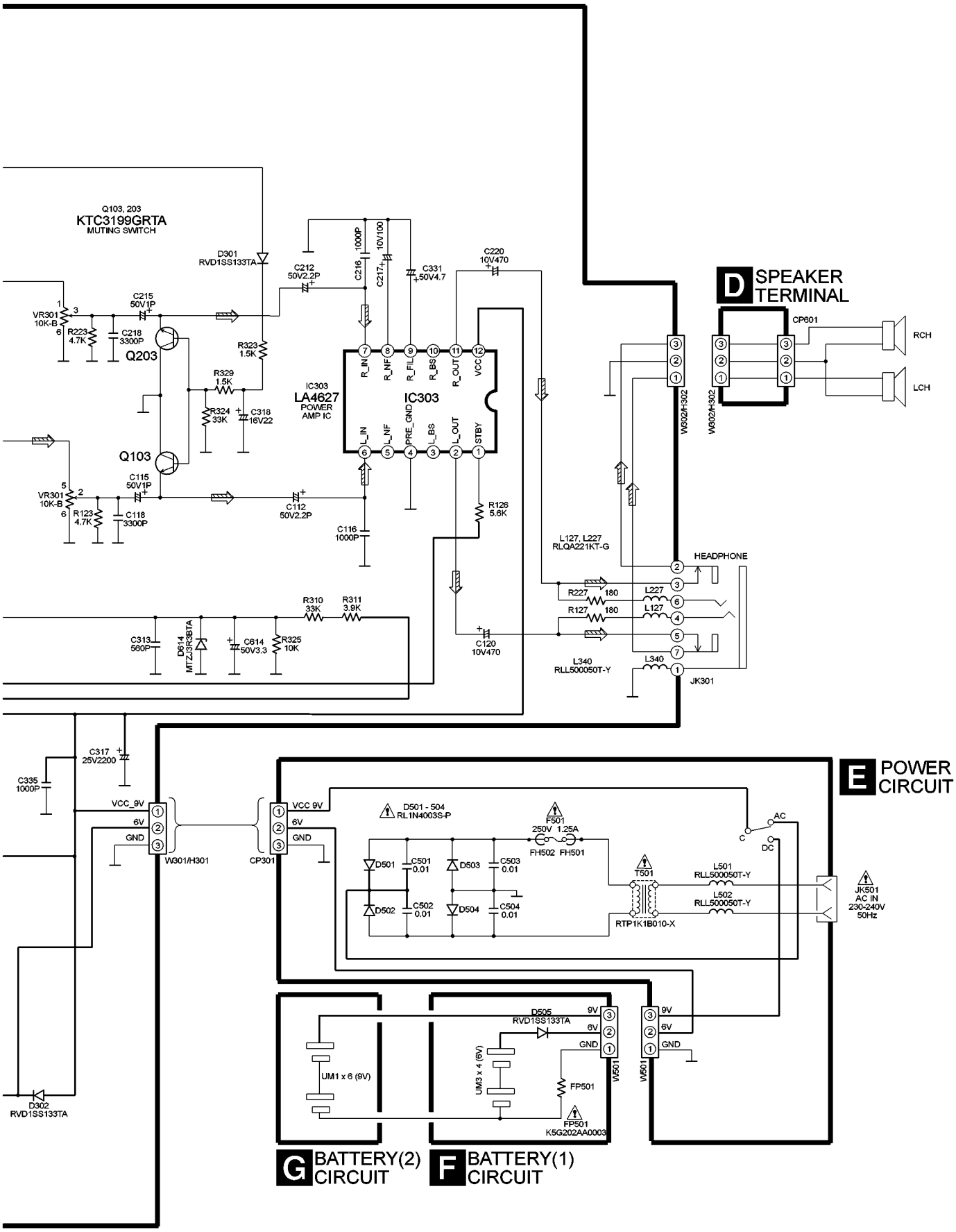


SCHEMATIC DIAGRAM-7

B MAIN CIRCUIT

: Main Signal line

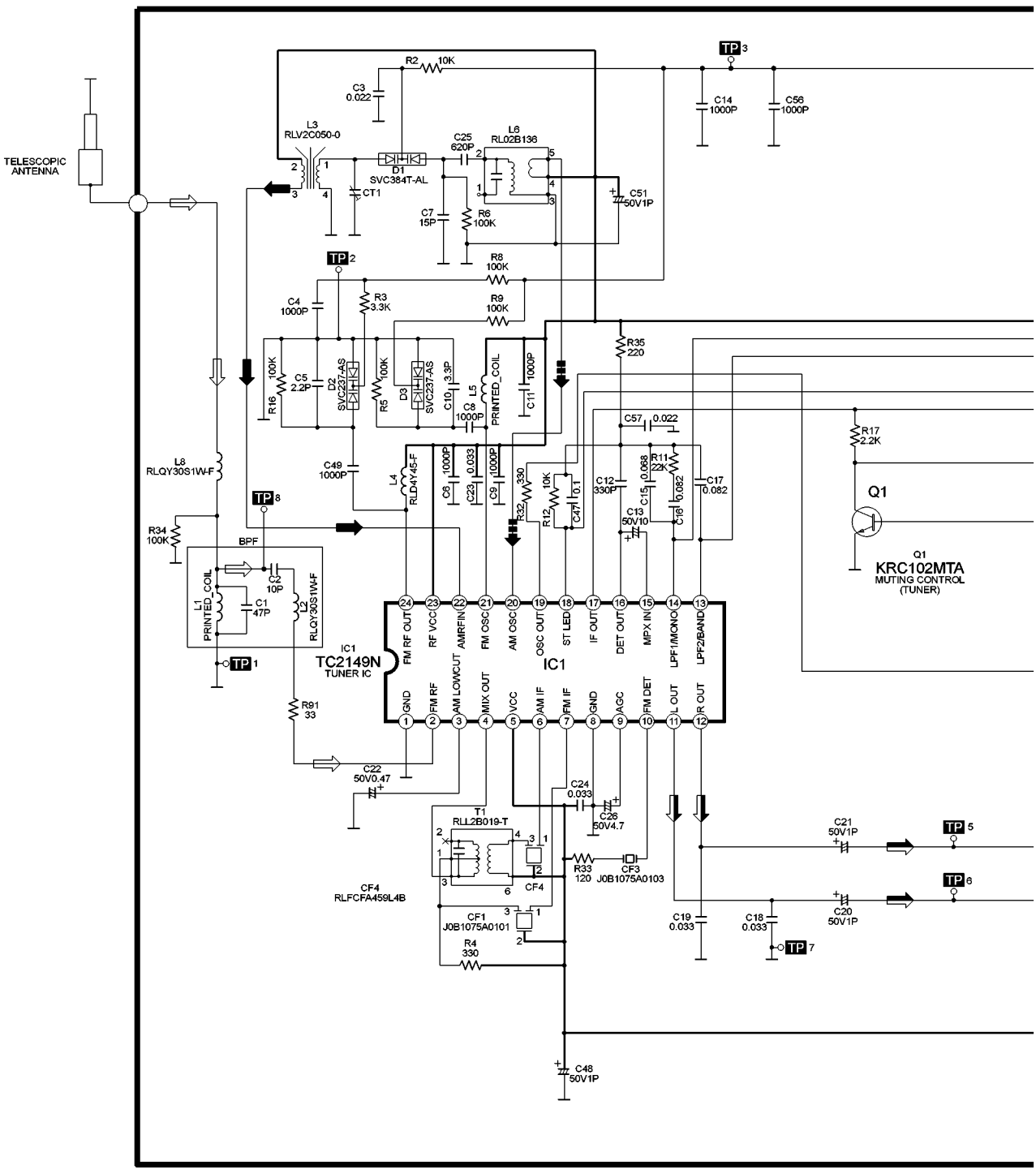
: +B Signal line



SCHEMATIC DIAGRAM-8

H TUNER CIRCUIT

: FM Signal line
: +B Signal line
: AM Signal line
: AM/FM Signal line
: AM OSC Signal line

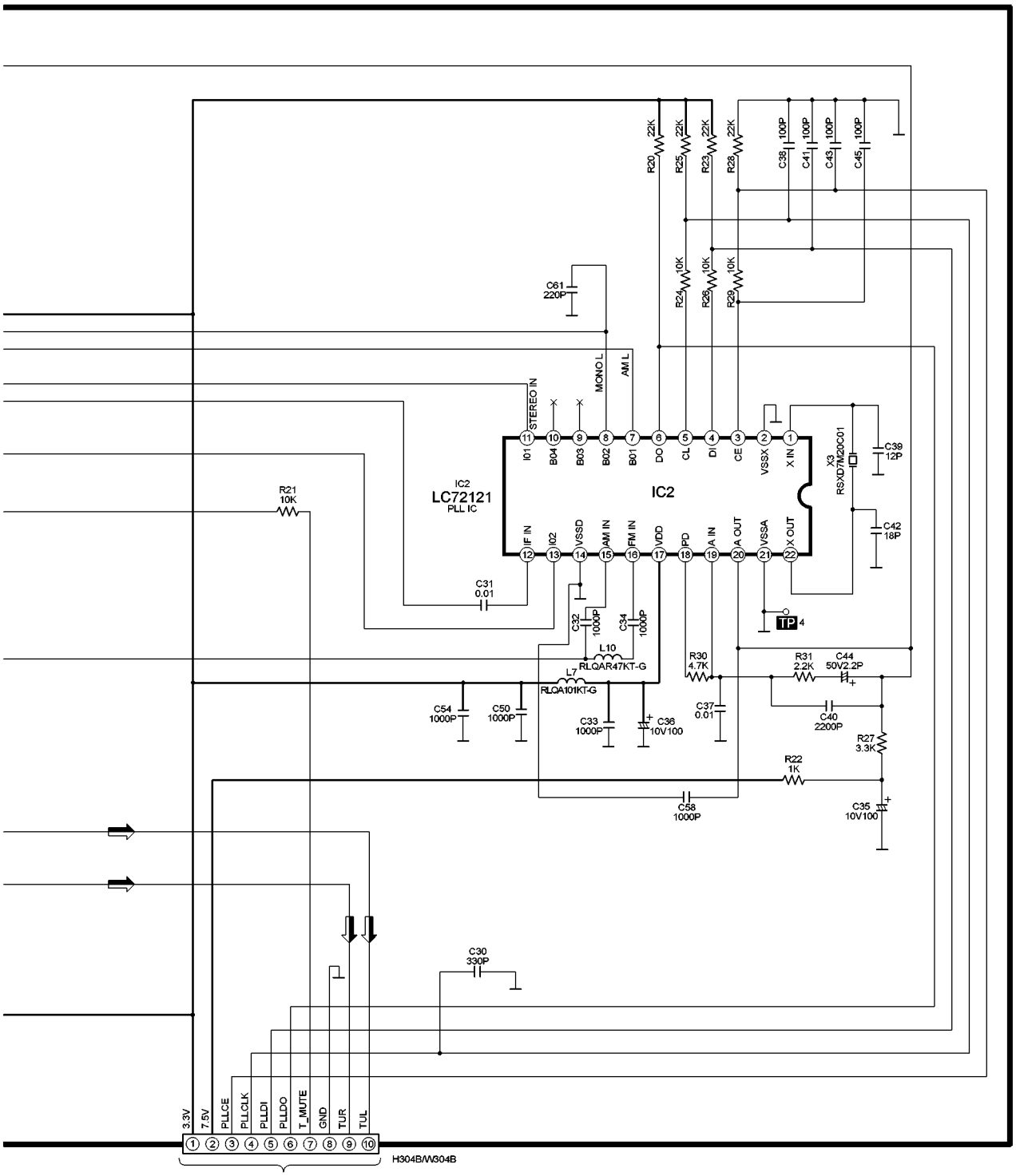


SCHEMATIC DIAGRAM-9

H TUNER CIRCUIT

: AM/FM Signal line

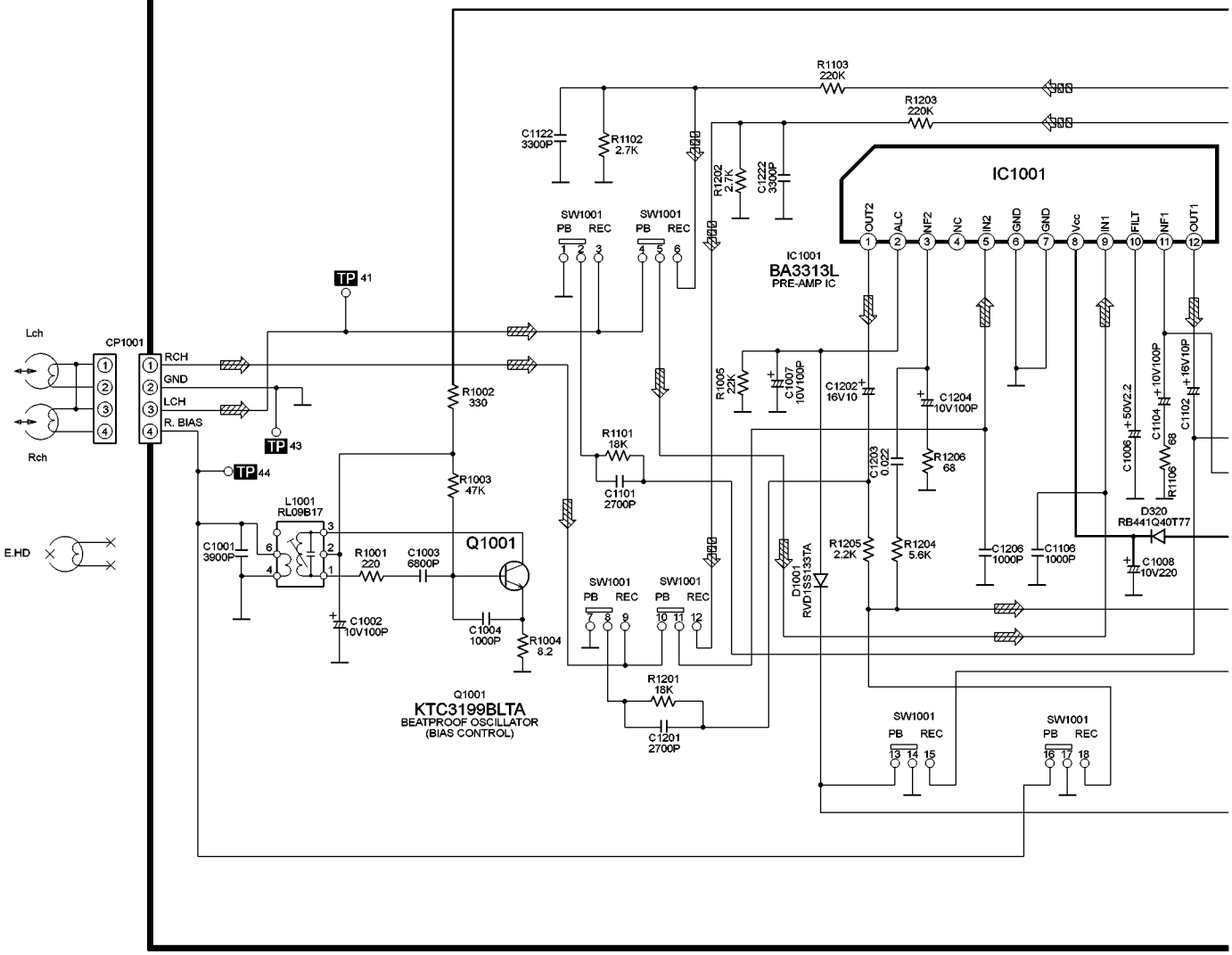
: +B Signal line



SCHEMATIC DIAGRAM-10

I DECK CIRCUIT

: Rec Signal line
: +B Signal Line
: Playback Signal Line



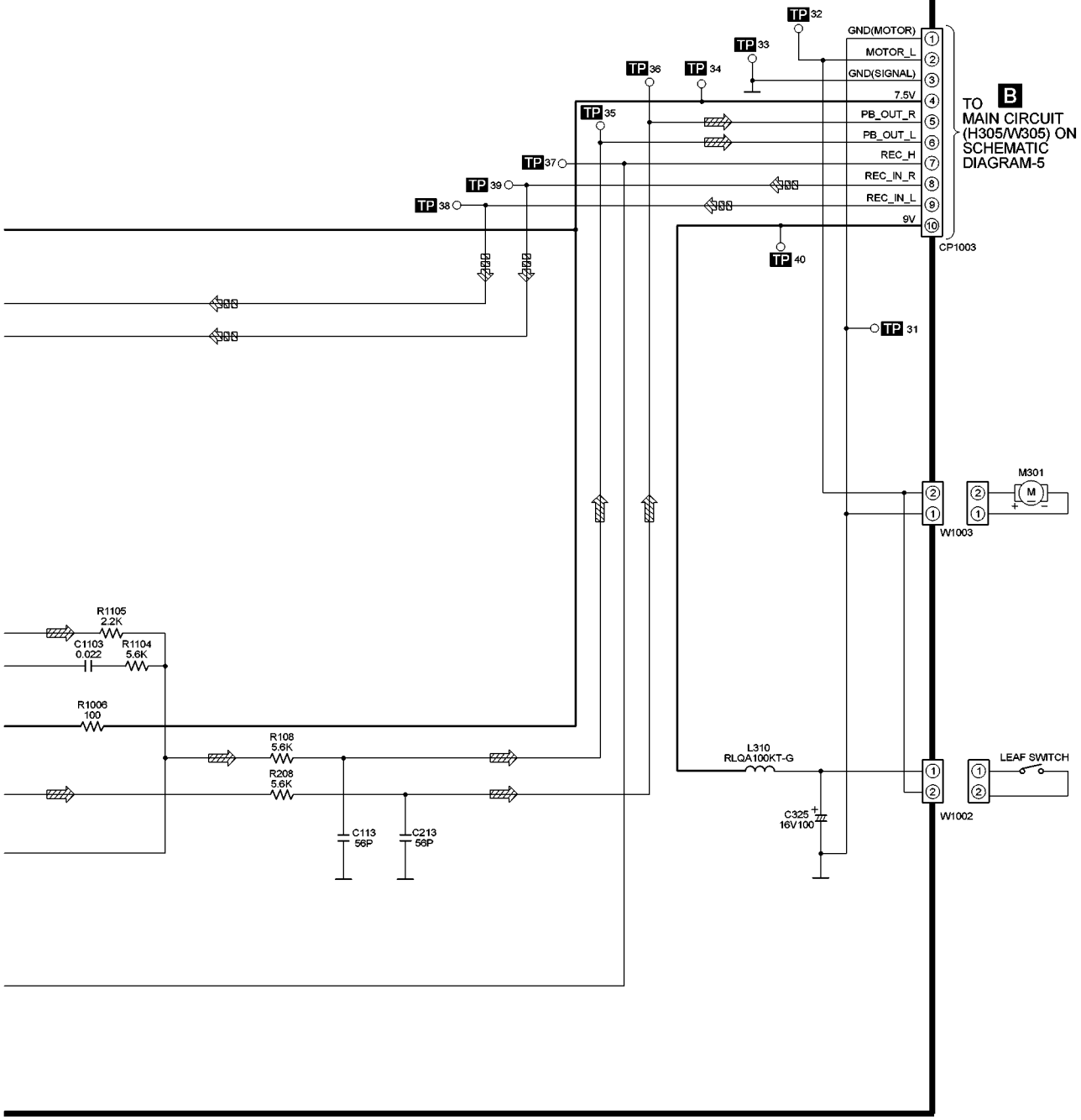
SCHEMATIC DIAGRAM-11

I DECK CIRCUIT

: +B Signal Line

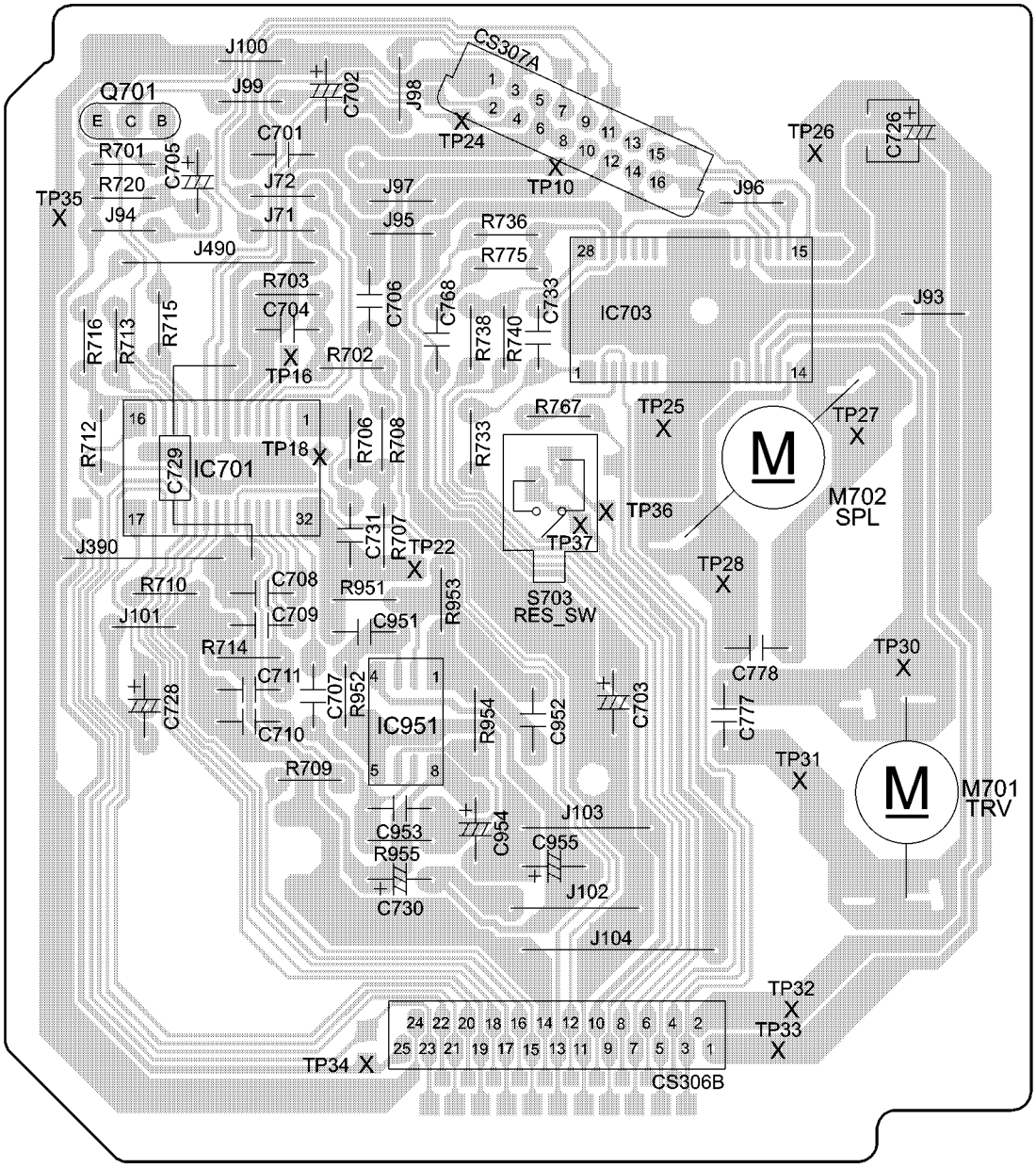
: Rec Signal line

: Playback Signal Line

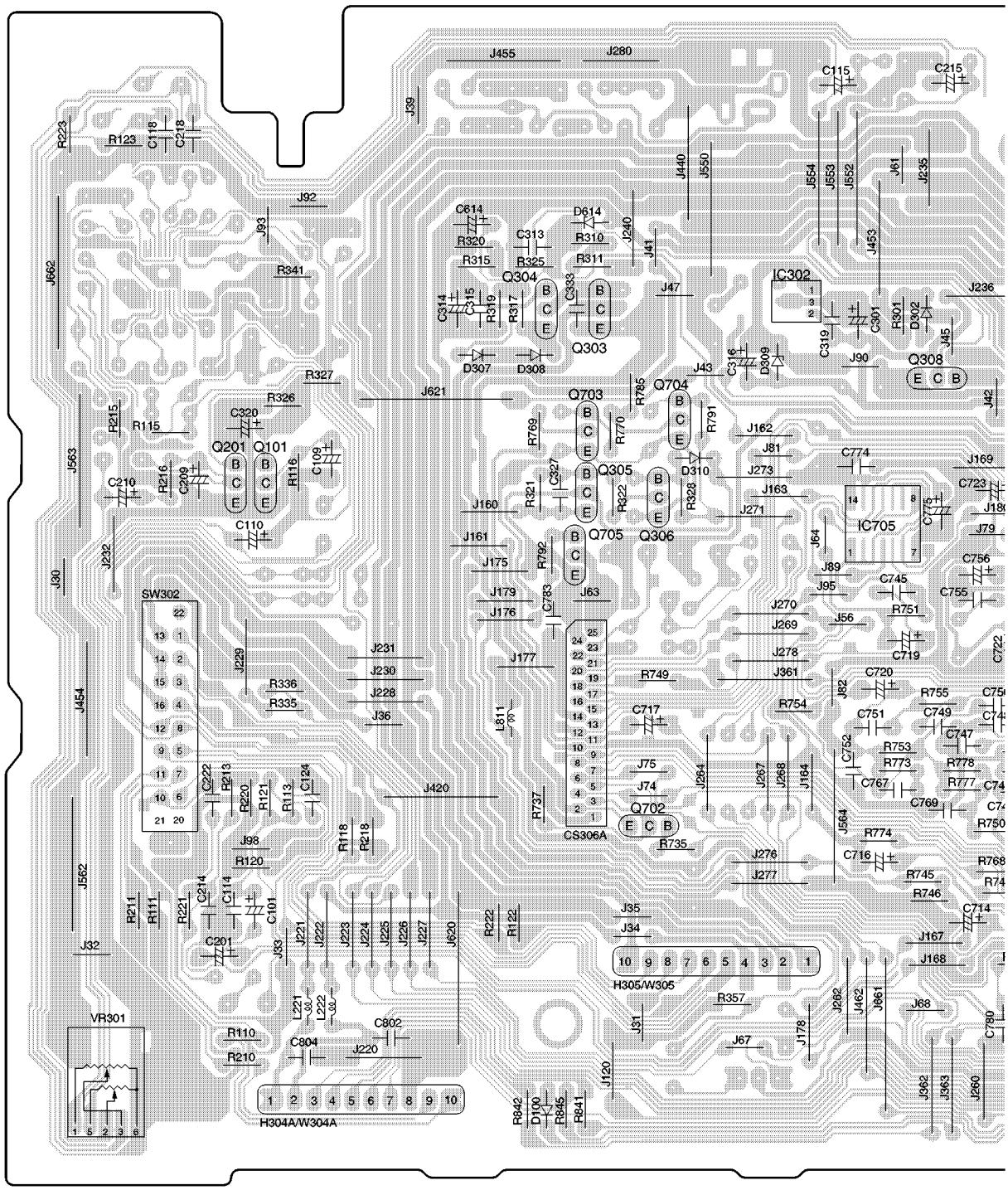


11 Printed Circuit Board

A CD SERVO P.C.B (REPX0340A)

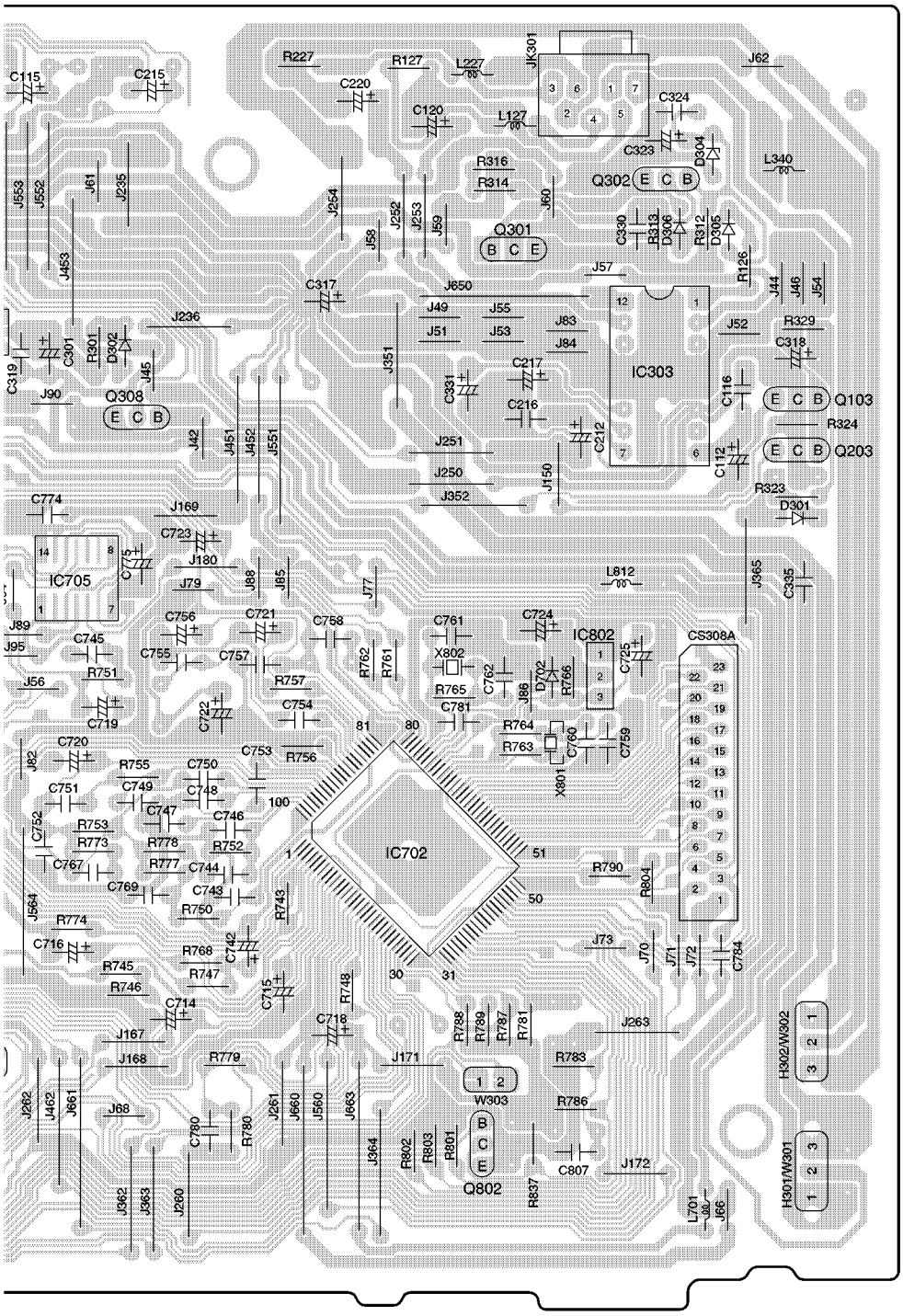


B MAIN P.C.B (REPX0246S)

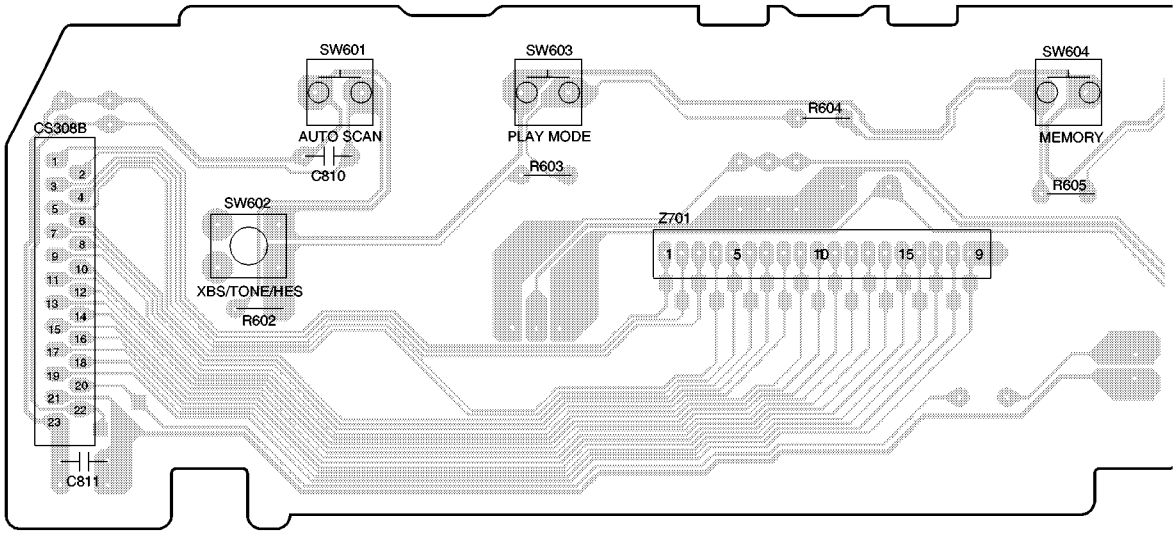


G H I J K L M

HEADPHONE

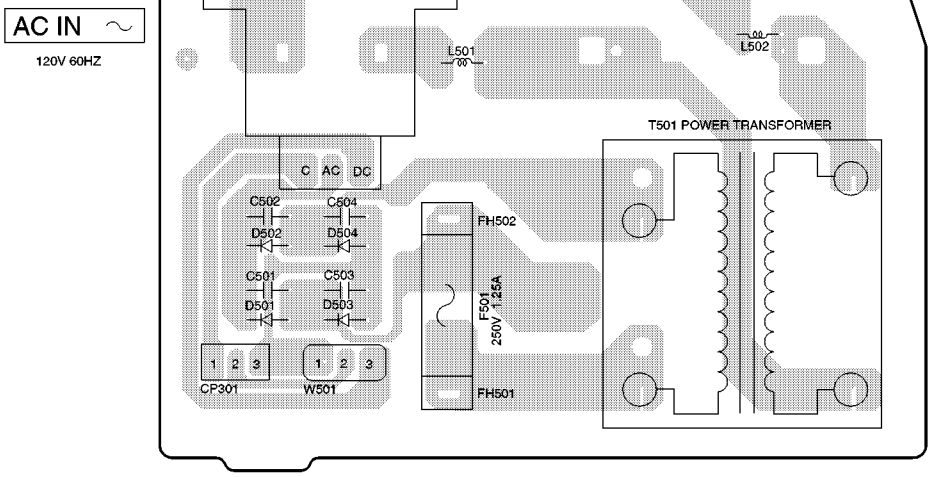


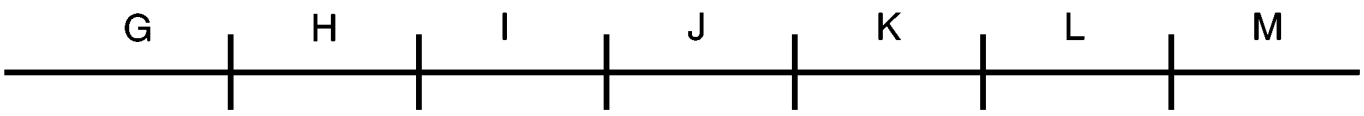
C PANEL P.C.B (REPX0246S)

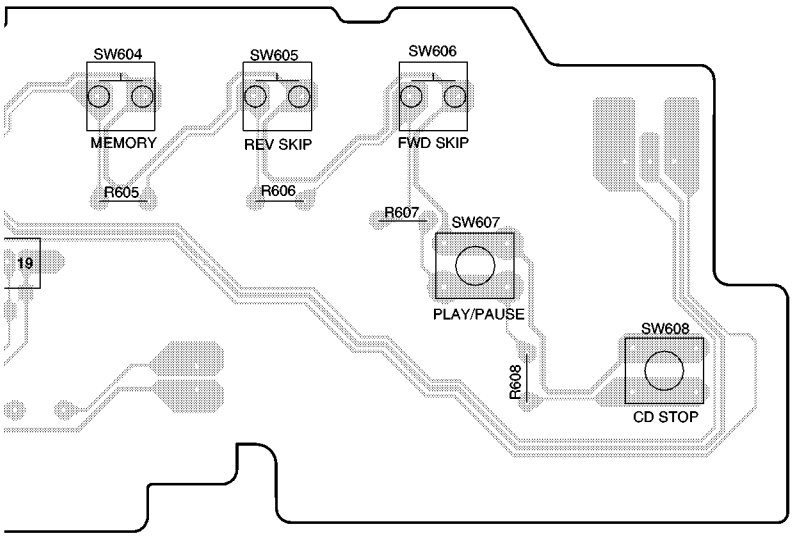


E POWER P.C.B (REPX0246S)

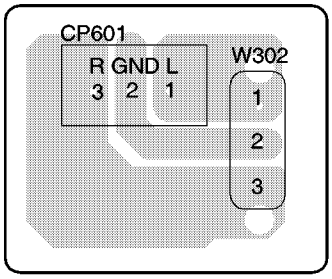
CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE. PLEASE DO NOT
TOUCH THIS P.C.B

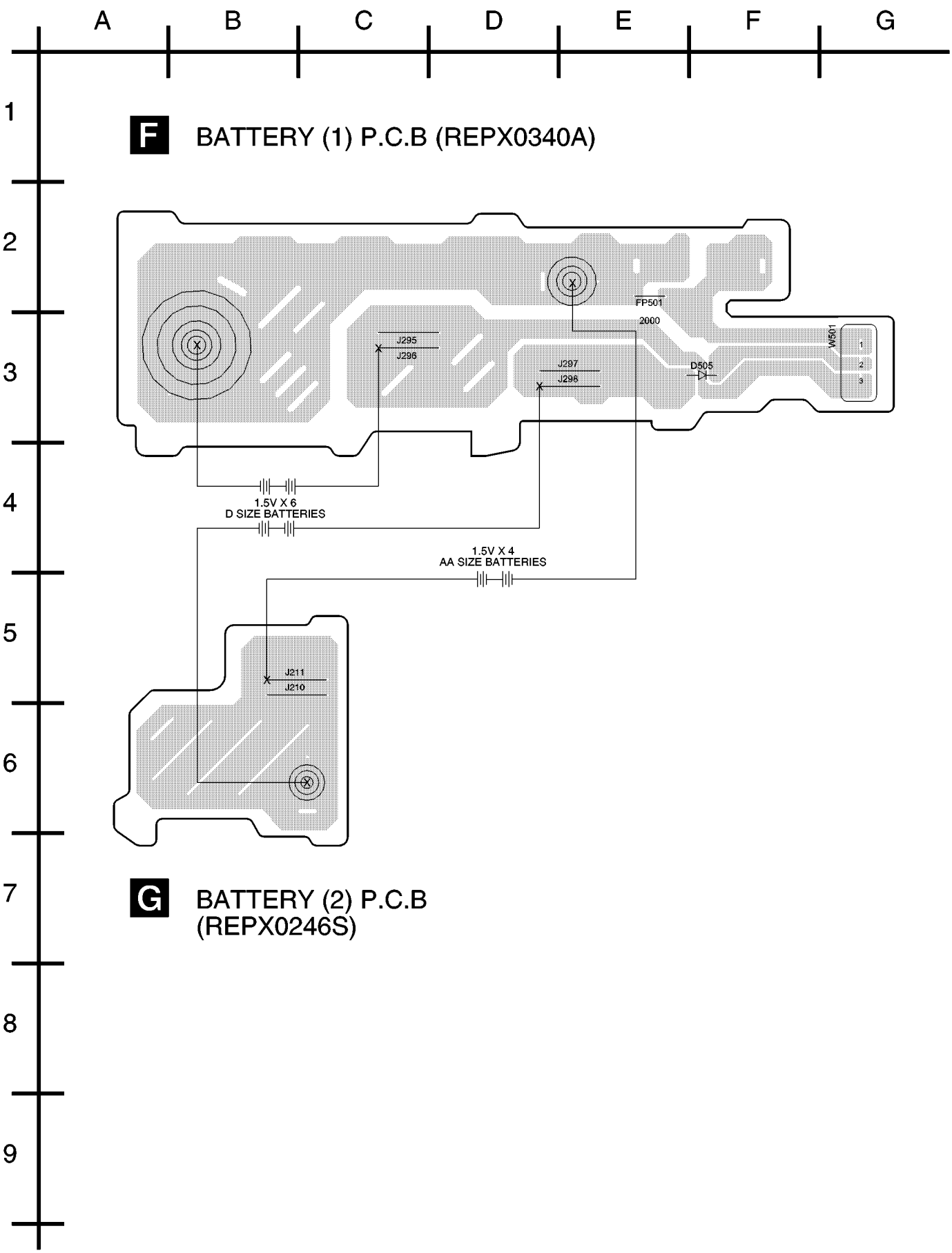




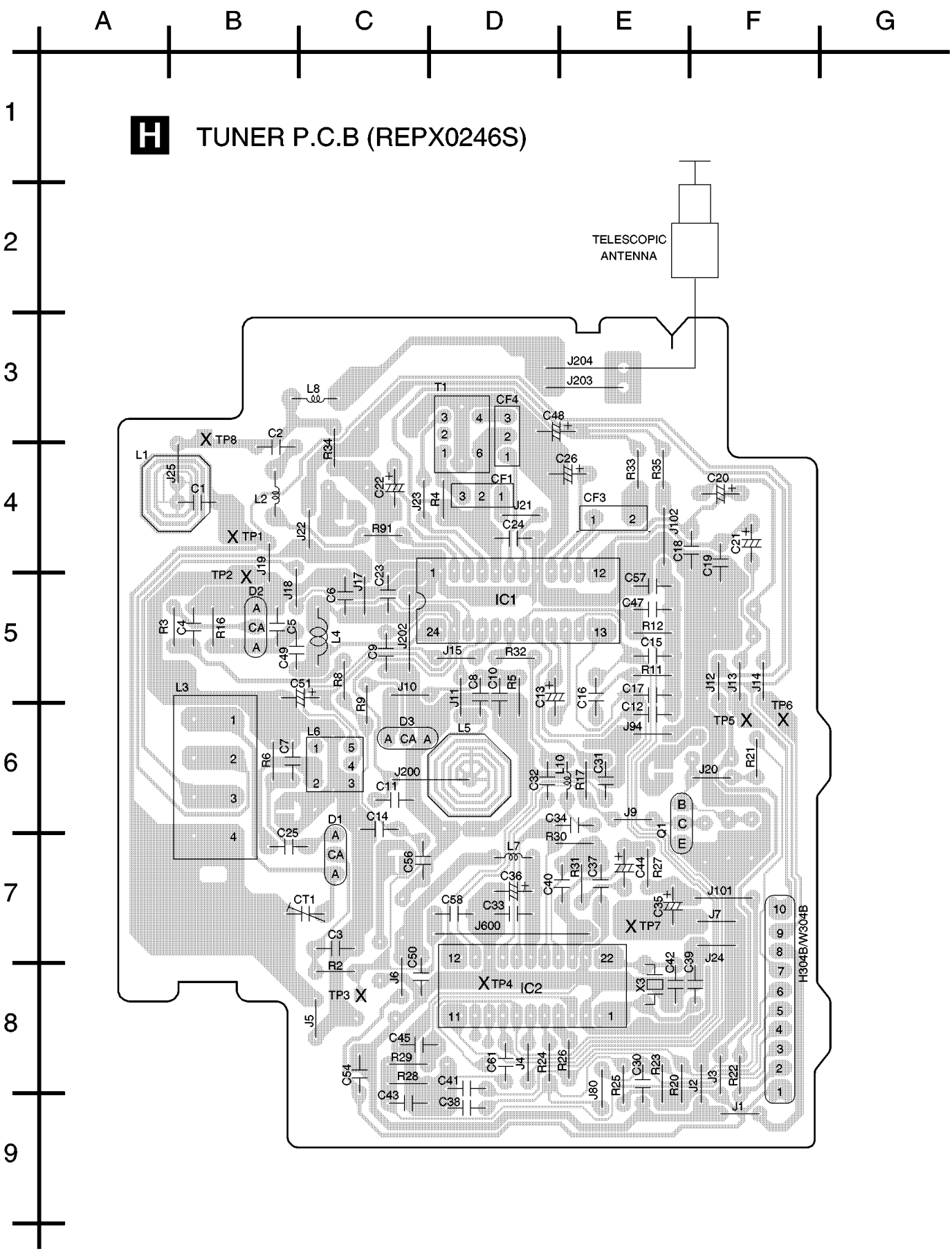


D SPEAKER TERMINAL P.C.B. (REPX0246S)

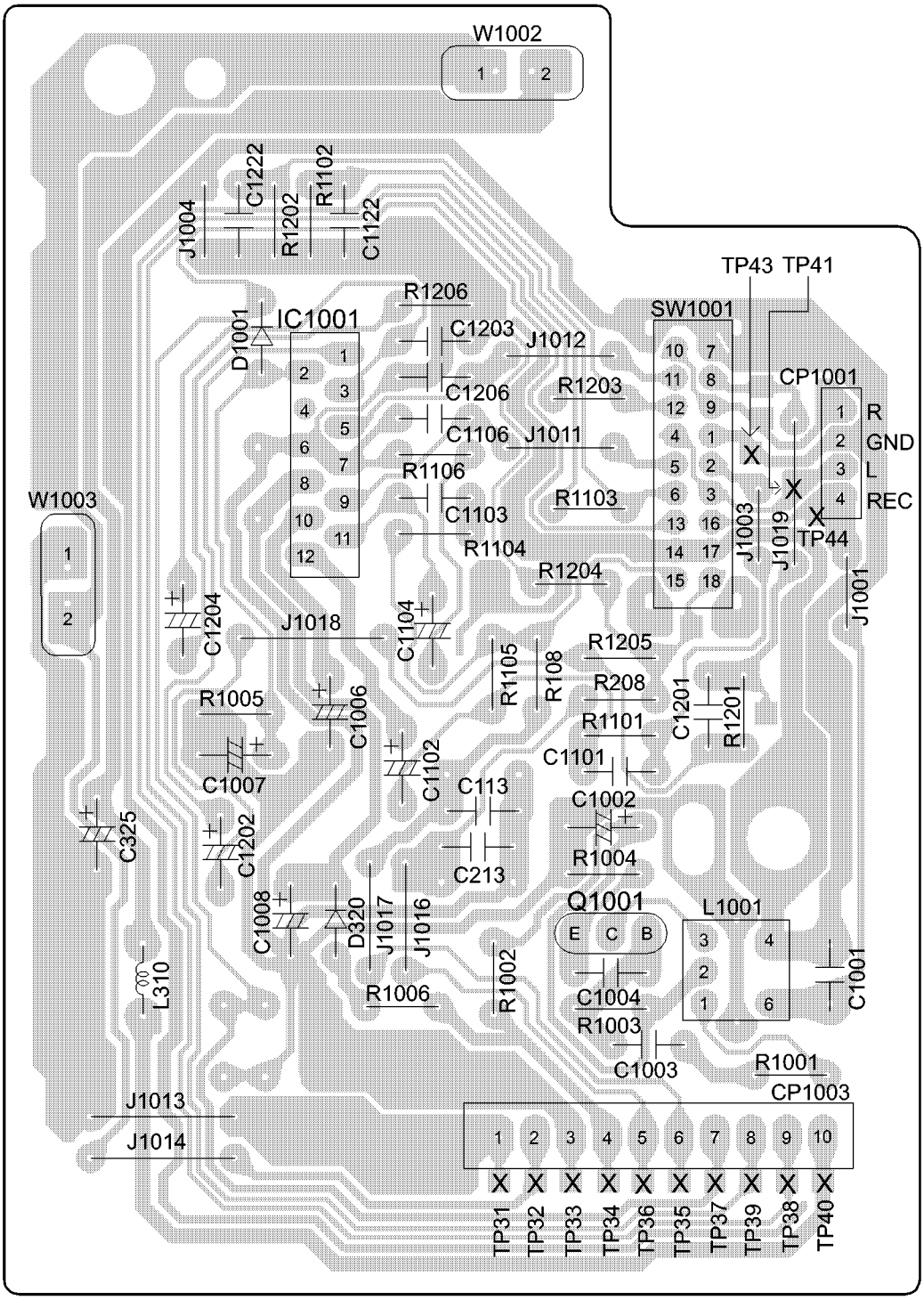



A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
F
BATTERY (1) P.C.B (REPX0340A)
FP501
2000
W501
1
2
3
J295
J296
J297
J298
D505
1.5V X 6
D SIZE BATTERIES
1.5V X 4
AA SIZE BATTERIES
J211
J210
G
BATTERY (2) P.C.B
(REPX0246S)

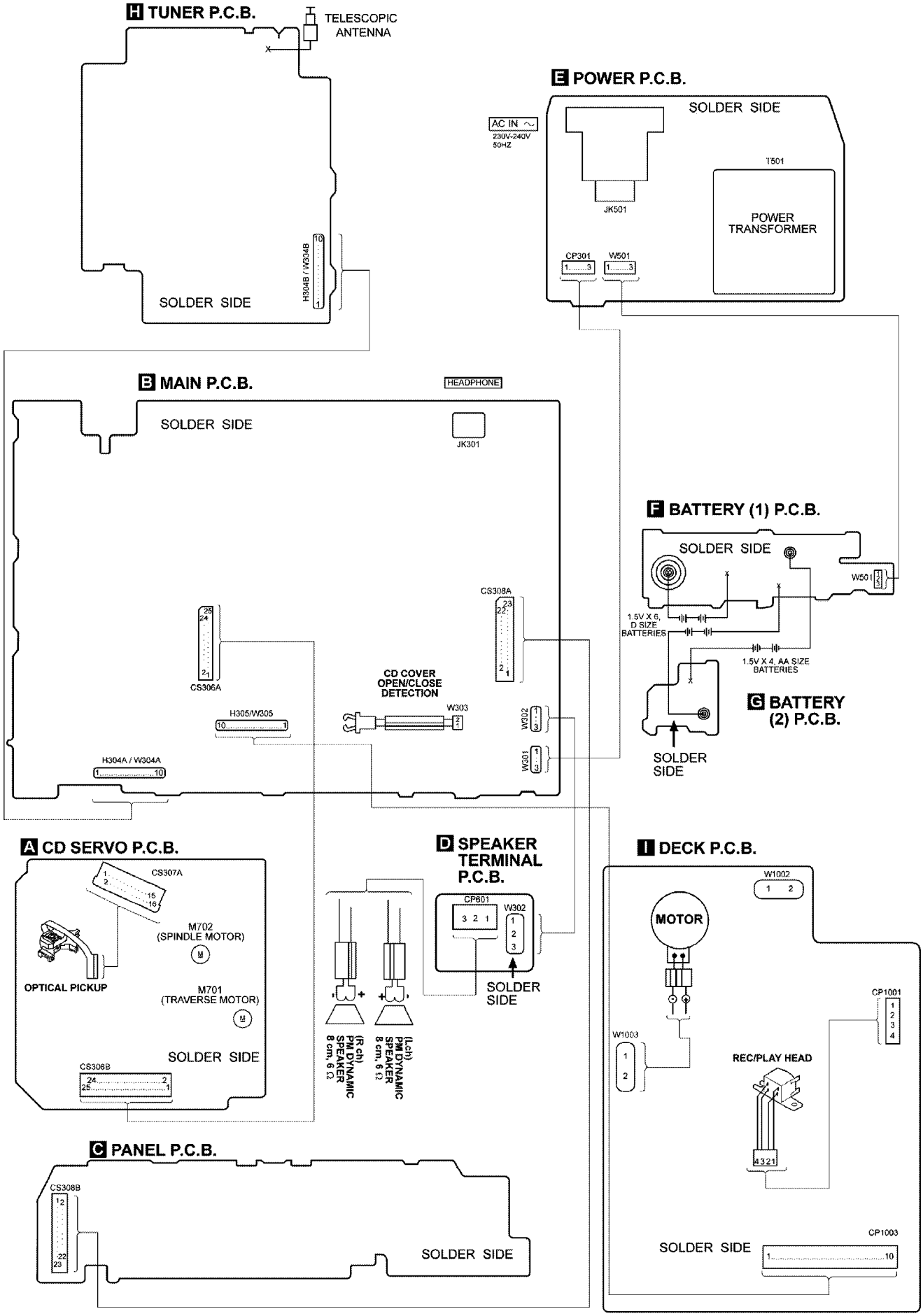
H TUNER P.C.B (REPX0246S)



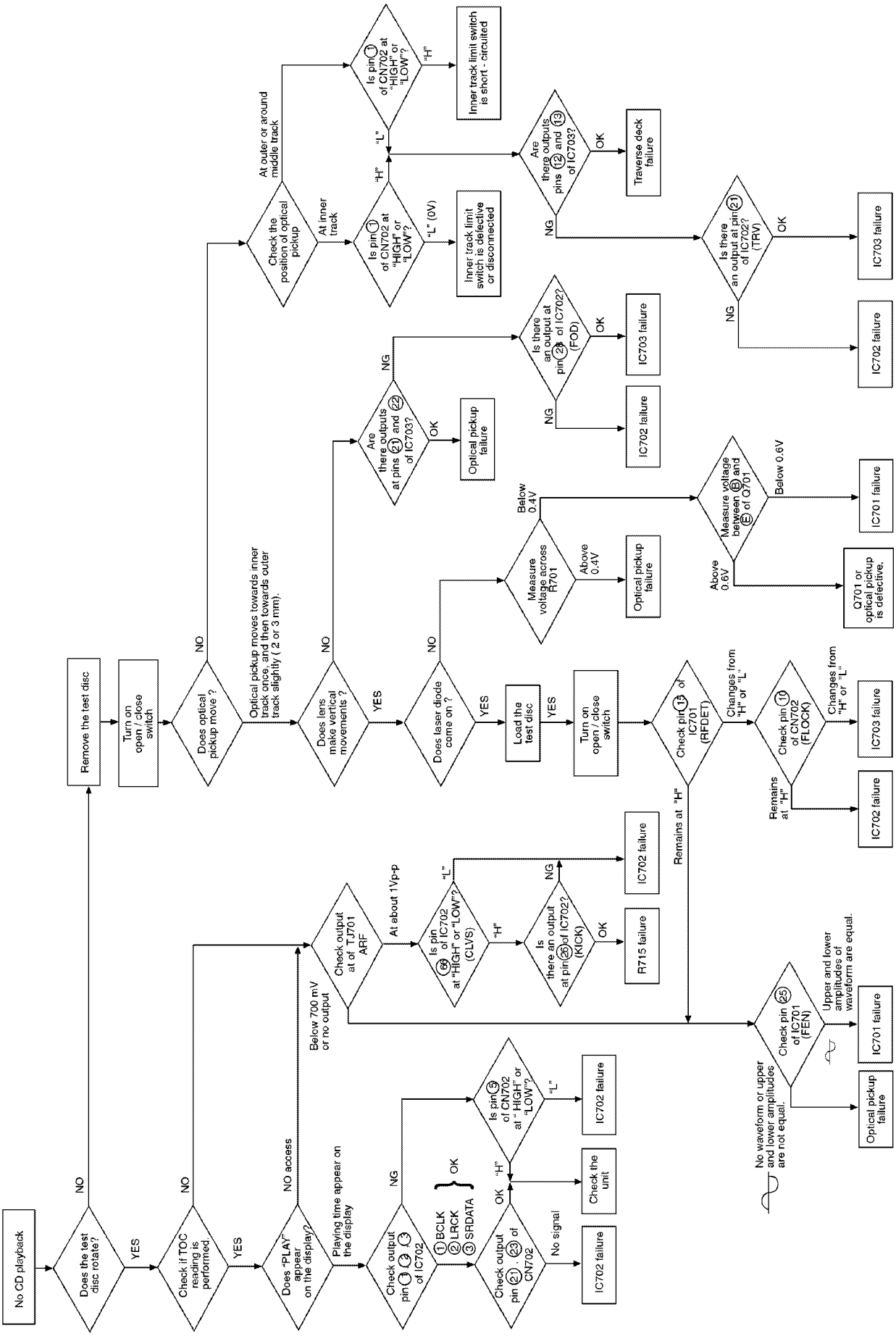
I DECK P.C.B (REPX0340A)



12 Wiring Connection Diagram



13 Troubleshooting Guide



14 Measurements and Adjustments

14.1. Tuner Adjustment

14.1.1. Required tools and equipment

- Signal generator
- AM loop antenna
- Oscilloscope or electrical voltage meter
- Headphone jig

14.1.2. Preparations for Adjustment

- Apply a setting, referring "Main Circuit Board Check" providing the procedures for disassembly and main parts replacement till operation check.
- Connect to the power supply (AC230V-240V).
- Maximize the volume.

14.1.3. AM RF Adjustment

1. Input AM signal generator output from the AM loop antenna.
2. Connect a measuring instrument to the headphone jack. (Fig. 6)
3. Tune to the signal (SG 540kHz).
4. Adjust L3 so that the output reaches maximum. (Fig. 1)
5. Tune to the signal (SG 1400kHz).
6. Adjust CT1 so that the output reaches maximum. (Fig. 1)

14.1.4. AM IF Adjustment

1. Follow the steps 1 and 2 of AM RF Adjustment.
2. Tune to the signal (SG 459kHz).
3. Revolve the T1 core and adjust that the output waveforms reaches maximum. (Fig. 2)

14.1.5. AM VCO Adjustment

1. Input AM single generator output from the AM loop antenna.
2. Set the electrical voltage meter to TP3 - TP1.
3. Tune to the signal (SG 522kHz).
4. Adjust L6 so that the output reaches DC 0.65V.

14.1.6. FM RF Adjustment

1. Set the frequency of FM signal generator to 87.5MHz.
2. Input to TP8 - TP2 through FM dummy antenna.
3. Adjust L4 so that the output reaches maximum. (Fig. 1)

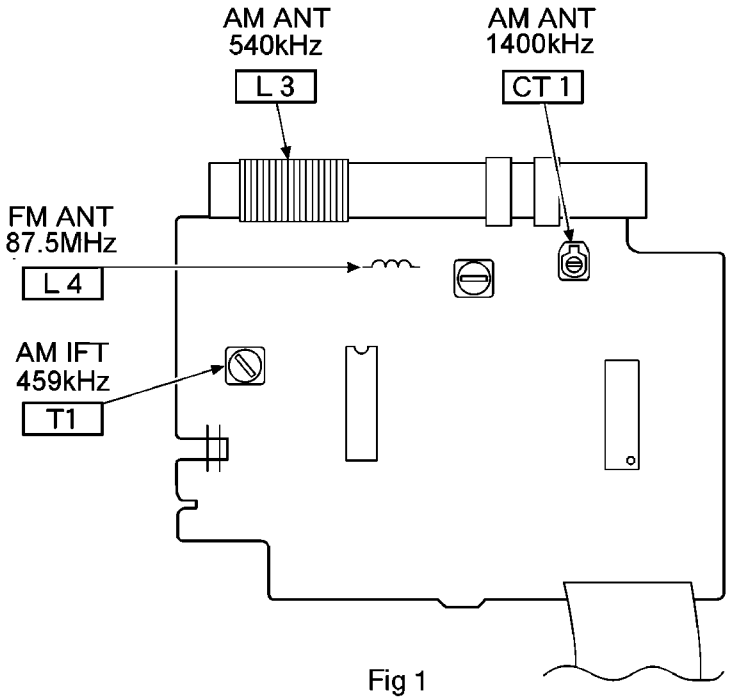


Fig 1

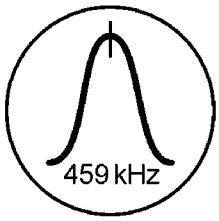


Fig 2

14.2. Deck Adjustment

14.2.1. Required tools and equipment

- Oscilloscope
- Frequency counter
- Test tape
- DC power supply
- Headphone jig

14.2.2. Head Azimuth Adjustment

1. Play the test tape (QZZCFM) and adjust the azimuth adjustment screw so that the output reaches maximum. (Fig. 3)
2. After adjustment, fasten the azimuth adjustment screw.

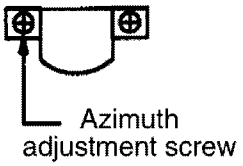


Fig 3

● BIAS AND ERASE VOLTAGE CHECK

1. Set the unit to TAPE mode.

2. Insert the Normal blank tape (QZZCRA) into DECK and set the unit to "REC" mode (use " ● REC/STOP" key).
3. Measure and make sure that the output is within the standard value.
4. Insert the CrO2 tape (QZZCRX).
5. Repeat steps 2 and 3.

Bias voltage for Deck (Standard value) : 14.0mV ± 2.0mV

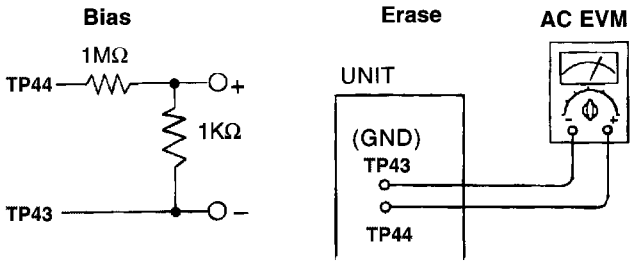


Fig 4

● BIAS FREQUENCY ADJUSTMENT (DECK)

1. Set the unit to TAPE mode.
2. Insert the Normal blank tape (QZZCRA) into DECK and set the unit to "REC" mode (use " ● REC/STOP" key).
3. Adjust L1001 so that the output frequency is within the standard value.

Standard Value : 54 KHZ ± 7 KHZ

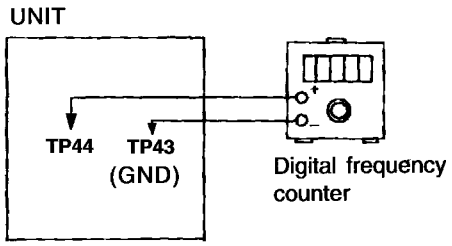


Fig 5

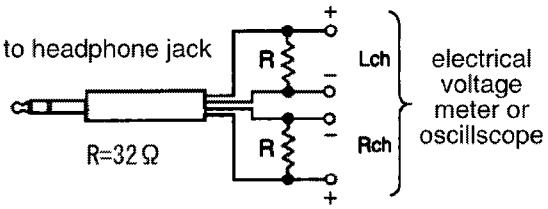
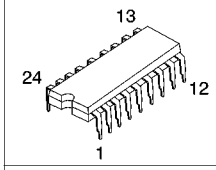
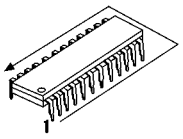
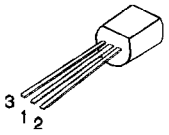
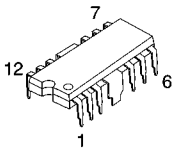
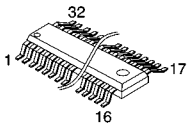
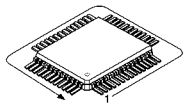
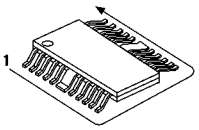
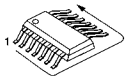
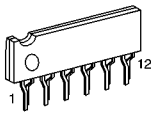
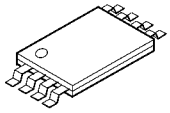
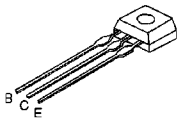
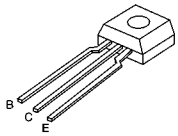
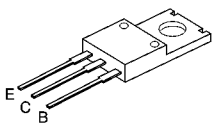
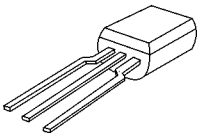
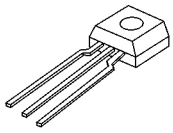
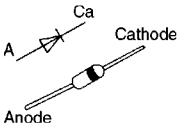
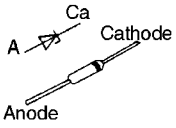
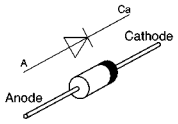


Fig 6

15 Type Illustrations of ICs, Transistors & Diodes

TA2149N 	LC72121T (22P) 	S81233SGUP PST9127T 	LA4627 	BA6770FS 	C2BBFE000122 (100P) 
BA5948FP (28P) 	BU4066BCF (14P) 	BA3313L (12P) 	C0ABBB000239 	KRA102MTA KRC102MTA 2SA933STA 	KTC3199GRTA KTC3199BLTA KTA1272YTA 
KTA1046 	KTA12710YTA 	SVC384T-AL SVC237-AS 	RVD1SS133TA RB441Q40T77 	MTZJ6R2CTA MTZJ7R5ATA MTZJ3R3BTA 	RL1N4003S-P 

16 Terminal Functions of ICs

• IC701 (BA6770FS) RF Head Amp

Pin No.	Mark	I/O	Function
1	RF-	I	RF summing amplifier return input pin
2	LON	O	LOOP ON voltage output pin
3	BD	I	B+D input pin
4	AC	I	A+C input pin
5	TB	I	Tracking error bias input pin
6	FE+	I	Focus bias input pin
7	VB	O	Bias amplifier output pin
8	GND	-	GND pin
9	E	I	E input pin
10	F	I	F input pin
11	LD	O	APC amplifier outpin pin.Capacitor connection pin for APC phase compensation
12	PD	I	APC amplifier input pin
13	TE-	I	Tracking error I-V amplifier return input pin
14	TE+	I	R connection pin for Tracking error I-V amplifier gain adjustment
15	FE-	I	Focus error amplifier return input pin
16	DPB	O	RF amplitude voltage output pin
17	R/H	-	Capacitor connection pin for lamp wave/loop off
18	SC	-	R connection pin for scratch depth adjustment
19	TE	O	Tracking error output pin
20	FON	I	Focus on control pin
21	FOK	O	Focus OK comparator pin
22	FE	O	Focus error output pin
23	DEFECT	O	Defect signal output pin
24	MIRR	O	Mirror signal output pin
25	VCC	-	Power supply pin
26	EFM	O	EFM signal output pin
27	ASY	I	Auto asymmetry control input pin
28	BLH	-	Capacitor connection pin for bottom long hold
29	PLH	-	Capacitor connection pin for peak long hold
30	CAGC	-	Capacitor connection pin for AGC time constant
31	RFI	I	RF output capacity connection re-input pin
32	RFO	O	RF summing amplifier output pin

• IC702 (C2BBFE000122) Microprocessor

Pin No.	Mark	I/O	Function
1	FDOUT	O	Focus drive out
2	JUMPO	O	Tracking jump out
3	TDOUT	O	Tracking drive out
4	SDIN	I	SDIN
5	SDOUT	O	SDOUT
6	CLVOUT	O	CLV Servo out
7	AVDD	-	Analog power source
8	LOUT	O	LCH audio out
9	VC	I	1-bit DAC bias
10	ROUT	O	RCH audio out
11	AGND	-	Analog ground
12	DGND	-	Digital ground
13	DPB_IN	-	No connection
14	CLV_IN	A-D	CLVIN
15	KEY_1	A-D	KEY 1 input
16	REG1	A-D	Region 1
17	P_DET	A-D	Power detect input
18	DVDD	-	Digital power source
19	TB_PWM	O	Tracking balance 8 bit power out
20	PLL_CLK	I/O	PLL CLOCK output
21	PLL_DI	I/O	PLL DATA output
22	PLL_DO	I/O	PLL IF count output
23	REMOCON _IN	I/O	Remote controller input
24	TONE	I/O	Tone control
25	VDD_CTL	I/O	VDD control
26	FB_PWM	I/O	Focus balance 8 bit power out
27	TEST0	-	No connection
28	TBR_ADJ	I	Track adjustment
29	FBR_ADJ	I/O	Focus adjustment
30	OPN_SW	I/O	Open/close switch
31	REST SW	I/O	CD limit SW input for the most inner point
32	SEL_IN	I/O	Selector input
33	CD_SEL	I/O	CD mode select in
34	TAPE_SEL	I/O	Tape mode select in
35	TUNER_SEL	I/O	Tuner mode select in
36	GND	I	To ground
37	P_CNT	I/O	Power control
38	REC_H	I/O	Record high
39	M_MUTE	I/O	M_MUTE
40	REG2	I/O	Region 2
41	REG3	I/O	Region 3
42	TG_ADJ	I/O	TG adjustment
43	T_MUTE	I/O	Tuner mute
44	REG_CTL	I/O	Region control
45	MUTE_A	I/O	Muting signals A
46	HES	I/O	Harmonic enhancer sound
47	PLL_CE	I/O	PLL Chip enable output
48	NEW DIF	I/O	New diffect
49~63	SEG14~SEG0	I/O	LCD segment drive output
64~67	COM3~COM0	I/O	LCD common drive output
68	DIGIOUT	-	No connection
69	DGND	-	Digital ground
70	XIN75	I	75 kHz OSC IN
71	XOUT75	O	75 kHz OSC OUT
72	TEST1	-	No connection
73	RESETB	I	System reset input
74	DVDD	-	Digital power source
75	XIN16M	I	16 MHz OSC IN
76	XOUT16M	O	16 MHz OSC OUT
77	DGND	-	Digital ground
78	ASY	O	EFM digital output
79	EYE	I	EFM signal output
80	MIRR	I	Mirror signal output
81	DEFECT	I	Defect signal input
82	AVDD	-	Analog power source
83	FCO	O	PLL FCO output
84	PCO	O	PLL PCO output
85	VC	I	Servo reference
86	ADPFI	I	PLL OP amplifer -ve input
87	ADPFO	-	PLL OP amplifer output
88	AGND	-	Analog ground
89	RVCO	I	Pin with VCO oscillation frequency setting resistance
90	FOK	I	Focus OK output
91	FEIN	I	Focus error
92	FCAP	O	Focus LPF capacitor connection
93	FON	O	Focus on
94	TEIN	I	Tracking error
95	ATS	I	Anti-shock input
96	TZC	I	Tracking zero cross input
97	TCAP	O	Tracking LPF capacitor connection

Pin No.	Mark	I/O	Function
98	COMPC	O	Error measurement values for various adjustments, analog output
99	ADJ 1	O	Tracking balance
100	ADJ 2	I	Tracking gain balance

• IC703 (BA5948FP) 4CH Drive

Pin No.	Mark	I/O	Function
1	IN2	I	Motor driver (2) input
2	PC2	I	Turnable motor drive signal (“L”: ON)
3	IN1	I	Motor driver (1) input
4	PC1	I	Traverse motor drive signal (“L”: ON)
5	NC	-	Not used
6	NC	-	Not used
7	NC	I	Power supply (1) for driver
8	NC	-	Ground connection (1) for driver
9	PGND1	-	Ground connection (1) for driver
10	PVCC1	I	Power supply (1) for driver
11	D1-	O	Motor driver (1) reverse - action output
12	D1+	O	Motor driver (1) forward - action output
13	D2-	O	Motor driver (2) reverse - action output
14	D2+	O	Motor driver (2) forward - action output
15	D3-	O	Motor driver (3) reverse - action output
16	D3+	O	Motor driver (3) forward - action output
17	D4-	O	Motor driver (4) reverse - action output
18	D4+	O	Motor driver (4) forward - action output
19	PVCC2	I	Power supply (2) for driver
20	PGND2	-	Ground connection (2) for driver
21	NC	-	Not used
22	NC	-	Not used
23	NC	-	Not used
24	NC	-	Not used
25	VCC	I	Power supply terminal
26	VREF	I	Reference voltage input
27	IN4	I	Motor driver (4) input
28	IN3	I	Motor driver (3) input

17 Parts Location and Replacement Parts List

Notes:

- Important safety notice:

  Components identified by ⚠ 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 manufacturers's specified parts shown in the parts list.
- The parenthesized indications in the Remarks column specify the areas or color. (Refer to the cover page for area or color.)

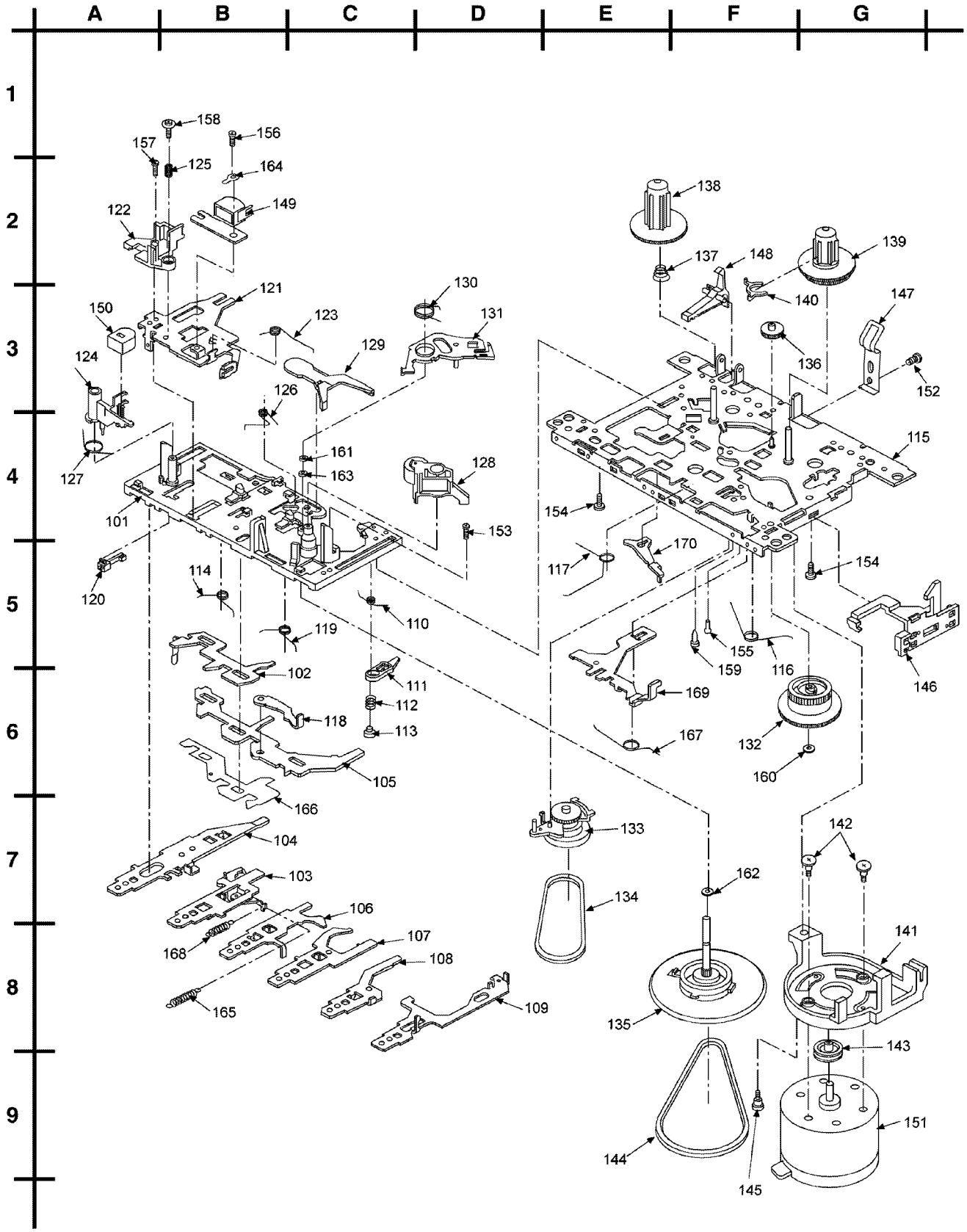
  Parts without these indications can be used for all areas.
- Warning: This product uses a laser diode. Refer to caution statements on "Precaution of Laser Diode".

  ACHTUNG:
  Die Lasereinheit nicht zerlegen.
  Die Lasereinheit darf nur gegen enie vom Hertsteller spezifizierte Einheit ausgetauscht werden.
- Capacitor values are in microfarad (μF) unless specified otherwise, P=Pico-farads(pF); Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1,000(ohms).
- The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availabilityis dependant on the type of assembly, and in accordance with the lows govening part and product retention. After the end of this period, the assembly will no longer be available.
- [M] indicates in the Remarks columns indicates parts that are supplied by **MESA** .
- The "(SF)" mark denotes the standard part.
- Reference for O/I book languages are as follows :

Ar : Arabic	Cf : Canadian French	Cz : Czech	Da : Danish
Du : Dutch	En : English	Fr : French	Ge : German
It : Italian	Ko : Korean	Po : Polish	Ru : Russian
Sp : Spanish	Sw : Swedish	Co : Traditional Chinese	Cn : Simplified Chinese

17.1. Deck Mechanism (RAA4601-Z)

17.1.1. Deck Mechanism Parts Location

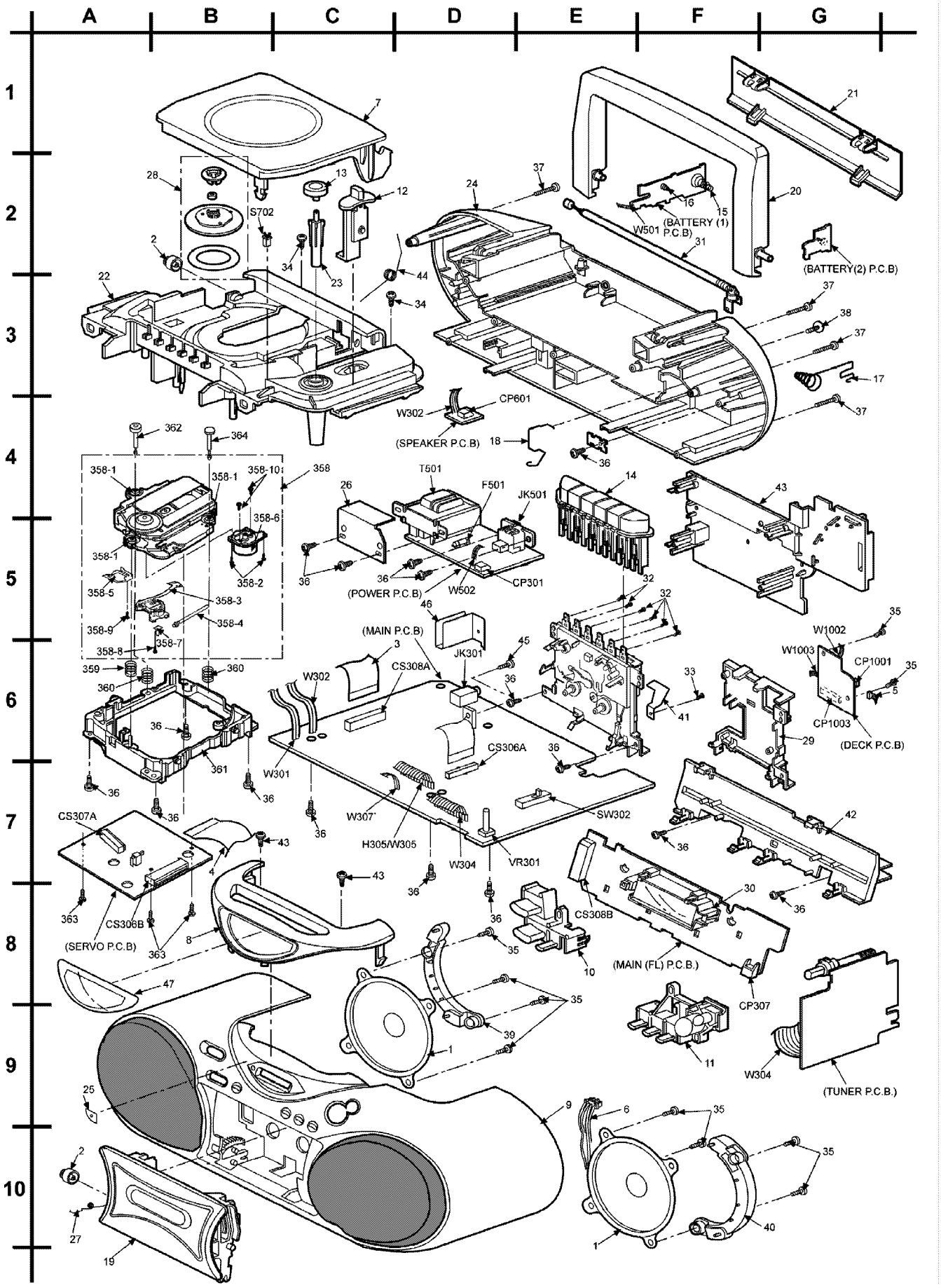


17.1.2. Deck Mechansim Part Lists

Ref. No.	Part No.	Part Name & Description	Remarks
		CASSETTE DECK	
101	RVD0001	BASE ASS´Y	[M]
102	RFY905ZA	SWITCH ACTUATOR	[M]
103	RFY881ZA	PUSH BUTTON ACTUATOR	[M]
104	RFY896ZA	REC BUTTON LEVER	[M]
105	RUM0004	PLAY BUTTON LEVER AS	[M]
106	RUM0005	REW BUTTON LEVER	[M]
107	RUM0006	FF BUTTON LEVER	[M]
108	RFY899ZA	STOP BUTTON LEVER	[M]
109	RFY952ZA	PAUSE BUTTON LEVER	[M]
110	RFS837ZA	P CONTROL SPRING	[M]
111	RFS829ZA	PAUSE LEVER	[M]
112	RFS813ZA	PAUSE LEVER SPRING	[M]
113	RFX174ZA	PAUSE STOPPER	[M]
114	RUK0002	BUTTON LEVER SPRING	[M]
115	RFU159ZA	CHASSIS ASS´Y	[M]
116	RFS815ZA	E ACTUATOR SPRING	[M]
117	RUK0003	REC BUTTON LEVER SPR	[M]
118	RUM0007	E KICK LEVER	[M]
119	RUK0004	BUTTON LEVER SPRING	[M]
120	RFA91ZA	LEAF SWITCH	[M]
121	RFU156ZA	HEAD PANEL	[M]
122	RFU168ZA	HEAD BASE	[M]
123	RFS845ZA	PINCH ROLLER SPRING	[M]
124	RFY926ZA	MG ARM	[M]
125	RFS447ZA	AZIMUTH SPRING	[M]
126	RUK0005	M CONTROL SPRING	[M]
127	RFS821ZA	MG ARM SPRING	[M]
128	RYJ0001	PINCH ROLLER ARM ASS	[M]
129	RUM0008	SENSING LEVER	[M]
130	RFS822ZA	GEAR PLATE SPRING	[M]
131	RFY874ZA	GEAR PLATE ASS´Y	[M]
132	RFG136ZA	CAM GEAR	[M]
133	RFQ60ZA	RF CLUTCH ASS´Y	[M]
134	RUA0004	RF BELT	[M]
135	RUC0002	FLYWEEL ASS´Y	[M]
136	RFG110ZA	FF GEAR	[M]
137	RUK0006	BACK TENSION SPRING	[M]
138	RUZ0001	S REEL SPRING	[M]
139	RUF0002	TAKE UP REEL ASS´Y	[M]
140	RUZ0002	SENSOR	[M]
141	RUB0001	MOTOR BRACKET	[M]
142	RFE499ZA	SCREW	[M]
143	RUG0001	MOTOR PULLEY	[M]
144	RUA0005	MAIN BELT	[M]
145	RFE511ZA	MB SCREW	[M]
146	RFY889ZA	EJECT SLIDE LEVER	[M]
147	RFS467ZA	PACK SPRING	[M]
148	RUM0009	RECORD SAFETY LEVER	[M]
149	RUE0002	RP HEAD	[M]
150	RUE0003	E HEAD	[M]
151	RVB0002	MOTOR	[M]
152	RUP0001	SCREW	[M]
153	RUP0002	SCREW	[M]
154	RUP0003	SCREW	[M]
155	RUP0004	SCREW	[M]
156	RUP0005	SCREW	[M]
157	RUP0006	SCREW	[M]
158	RUP0007	SCREW	[M]
159	RUP0008	SCREW	[M]
160	RUH0001	P WASHER	[M]
161	RUH0002	P WASHER	[M]
162	RUH0003	P WASHER	[M]
163	RUH0004	P WASHER	[M]
164	RUZ0003	LUG BORD	[M]
165	RUK0008	LIFT UP SPRING	[M]
166	RUZ0004	T.P.S. ACTUATOR	[M]
167	RFY896ZA	RC SLIDE LEVER SPRIN	[M]
168	RUK0007	RC SPRING	[M]
169	RFY883ZA	RC SLIDE LEVER	[M]
170	RFY880ZA	RC LEVER	[M]

17.2. Cabinet & CD Loading Mechanism

17.2.1. Cabinet & CD Loading Machanism Parts Location



17.2.2. Cabinet & CD Loading Machanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	L0AA10A00010	SPEAKER	[M]
2	RDG0288	DAMPER GEAR	[M]
3	REEX0109	PANEL TO MAIN FFC	[M]
4	REEX0110	25P CD FFC WIRE	[M]
5	REXX0141-J	TAPE HEAD WIRE	[M]
6	REXX0244-J	SPEAKER WIRE	[M]
7	RGKX0075A-2A	CD LID	[M]
8	RGKX0114C-S	LCD ORNAMENT	[M]
9	RYKW0052A-S	FRONT CABINET ASS´Y	[M]S
9	RYKW0052D-S	FRONT CABINET ASS´Y	[M]A
10	RGUX0393-3A	OPERATION BUTTON (L)	[M]
11	RGUX0394-3A	OPERATION BUTTON (R)	[M]
12	RGVX0022-H	FUNCTION KNOB	[M]
13	RGWX0058-H	VOLUME KNOB	[M]
14	RGZX0039-H	MECHA BUTTON	[M]
15	RJC511XB	BATTERY TERMINAL	[M]
16	RJC70031ZC	BATTERY TERMINAL	[M]
17	RJCX0005	BATTERY TERMINAL	[M]
18	RJRX0009	ANTENNA TERMINAL	[M]
19	RYFX0118-A	CASS LID ASS´Y	[M]A
19	RYFX0119-S	CASS LID ASS´Y	[M]S
20	RKHX0014-2H	HANDLE	[M]
21	RKK318ZC-A	BATTERY COVER	[M]A
21	RKK318ZC-H	BATTERY COVER	[M]S
22	RKQX0012B-1H	TOP CABINET	[M]
23	RKQX0013	VOLUME KNOB FIXTURE	[M]
24	RFKHXD21EB-A	BACK CABINET ASS´Y	[M]EB-A
24	RFKHXD21EB-S	BACK CABINET ASS´Y	[M]EB-S
24	RFKHXD21E-A	BACK CABINET ASS´Y	[M]E-A
24	RFKHXD21E-S	BACK CABINET ASS´Y	[M]E-S
24	RKSX0040AA-A	BACK CABINET	[M]EG-A
24	RKSX0040AA-H	BACK CABINET	[M]EG-S
25	RKWX0151-1A	REMOTE SENSOR PANEL	[M]A
25	RKWX0151-1S	REMOTE SENSOR PANEL	[M]S
26	RMA1007A	SHIELD PLATE	[M]
27	RMB0347-1	OPEN SPRING	[M]
28	RFKNXD13PC-A	CD HOLDER ASS´Y	[M]
29	RMKX0069	MECHA CHASSIS	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
30	RMNX0043	LCD HOLDER	[M]
31	XEARR210CA-C	ROD ANTENNA	[M]
32	XTN1.6+6F	SCREW	[M]
33	XTN2+3F	SCREW	[M]
34	XTN3+12GFZ	SCREW (TOP CAB)	[M]
35	XTV3+10G	SCREW (SPEAKER)	[M]
36	XTV3+12G	SCREW	[M]
37	XTV3+20G	REAR CAB SCREW	[M]
38	XYN3+F15FY	SCREW	[M]
39	RKQX0017	SPEAKER FIXTURE L	[M]
40	RKQX0018	SPEAKER FIXTURE R	[M]
41	RMLX0016	CASS REC LEVER	[M]
42	RMNX0084	PANEL PCB HOLDER	[M]
43	RMNX0085	DECK PCB HOLDER	[M]
44	RMEX0009	CD OPEN SPRING	[M]
45	XTV3+6F	SCREW	[M]
46	RMYX0059	HEAT SINK	[M]
47	RKWX0171E-Q	LCD PANEL	[M]A
47	RKWX0171J-Q	LCD PANEL	[M]S
		TRAVERSE DECK	
358	RAE0152Z-1C	TRAVERSE	[M]
358-1	SHGD113-1	FLOATING CUSHION	[M]
358-10	XQS17+A35FZ	SCREW	[M]
358-2	SNSD38	TRV MOTOR ASS´Y SCRE	[M]
358-3	RAF0150A-1	OPTICAL PICKUP	[M]
358-4	RDG0247	DRIVE GEAR	[M]
358-5	RDG0248	INTERMEDIATE GEAR	[M]
358-6	RXQ0339	TRAVERSE MOTOR ASS´Y	[M]
358-7	RXQ0304-1	PLATE NUT ASS´Y	[M]
358-8	XQN17+CG5	NUT PLATE ASS´Y SCRE	[M]
358-9	XQS2+A3FZ	SCREW	[M]
359	RME0142	FLOATING SPRING A	[M]
360	RME0109	FLOATING SPRING B	[M]
361	RMR0698-K1	TRAVERSE CHASSIS	[M]
362	RMS0627	FIXED PIN B	[M]
363	XTN2+6G	SCREW	[M]
364	RMS0350	FIXED PIN A	[M]

17.3. Components Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		P.C.B.	
	REPX0340A	CD SERVO P.C.B./BATTERY (1) P.C.B./DECK P.C.B.	[M]
	REPX0246S	MAIN P.C.B./PANEL P.C.B./POWER P.C.B./SPEAKER TERMINAL P.C.B./BATTERY (2) P.C.B./TUNER P.C.B.	[M]
		INTEGRATED CIRCUITS	
IC1	TA2149N	IC TUNER	[M]
IC2	LC72121T	IC PLL	[M]
IC302	S81233SGUP	IC 3.3V REGULATOR	[M]
IC303	LA4627	IC POWER AMP	[M]
IC701	BA6774FS	IC RF HEAD AMP	[M]
IC702	C2BBFE000122	IC MICRO-P	[M]
IC703	BA5948FP	IC 4 CH DRIVE	[M]
IC705	BU4066BCF	IC ANALOG SW	[M]
IC802	PST9127T	IC RESET	[M]
IC951	C0ABBB000239	IC BUFFER AMP	[M]
IC1001	BA3313L	IC PRE AMP	[M]
		TRANSISTORS	
Q1	KRC102MTA	TRANSISTOR	[M]
Q101	KTC3199GRTA	TRANSISTOR	[M]
Q103	KTC3199GRTA	TRANSISTOR	[M]
Q201	KTC3199GRTA	TRANSISTOR	[M]
Q203	KTC3199GRTA	TRANSISTOR	[M]
Q301	KTA1046	TRANSISTOR	[M]
Q302	KTC3199BLTA	TRANSISTOR	[M]
Q303	KTA12710YTA	TRANSISTOR	[M]
Q304	KTC3199BLTA	TRANSISTOR	[M]
Q305	KTA12710YTA	TRANSISTOR	[M]
Q306	KTC3199GRTA	TRANSISTOR	[M]
Q308	KRA102MTA	TRANSISTOR	[M]
Q701	2SA933STA	TRANSISTOR	[M]
Q702	KTC3199GRTA	TRANSISTOR	[M]
Q703	KTC3199GRTA	TRANSISTOR	[M]
Q704	KTC3199GRTA	TRANSISTOR	[M]
Q705	KTA1272YTA	TRANSISTOR	[M]
Q802	KTC3199GRTA	TRANSISTOR	[M]
Q1001	KTC3199BLTA	TRANSISTOR	[M]
		DIODES	
D1	SVC384T-AL	DIODE	[M]
D2	SVC237-AS	DIODE	[M]
D3	SVC237-AS	DIODE	[M]
D301	RVD1SS133TA	DIODE	[M]
D302	RVD1SS133TA	DIODE	[M]
D304	MTZJ7R5ATA	DIODE	[M]
D305	RVD1SS133TA	DIODE	[M]
D306	RVD1SS133TA	DIODE	[M]
D307	RVD1SS133TA	DIODE	[M]
D308	RVD1SS133TA	DIODE	[M]
D309	MTZJ6R2CTA	DIODE	[M]
D310	RB441Q40T77	DIODE	[M]
D320	RB441Q40T77	DIODE	[M]
D501	RL1N4003S-P	DIODE	[M] ⚠
D502	RL1N4003S-P	DIODE	[M] ⚠
D503	RL1N4003S-P	DIODE	[M] ⚠
D504	RL1N4003S-P	DIODE	[M] ⚠
D505	RVD1SS133TA	DIODE	[M]
D614	MTZJ3R3BTA	DIODE	[M]
D702	RVD1SS133TA	DIODE	[M]
D1001	RVD1SS133TA	DIODE	[M]
		VARIABLE RESISTORS	
VR301	RRV12B05B14V	VR VOLUME	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		SWITCHES	
S702	RSP1A026-Q	INTERLOCK SWITCH	[M]
S703	RSH1A053-U	SW REST	[M]
SW302	RSS3D006-G	SW FUNCTION	[M]
SW601	EVQ21405R	SW AUTO SCAN	[M]
SW602	EVQPAD05R	SW XBS/TONE/HES	[M]
SW603	EVQ21405R	SW PLAY MODE	[M]
SW604	EVQ21405R	SW MEMORY	[M]
SW605	EVQ21405R	SW REV SKIP	[M]
SW606	EVQ21405R	SW FWD SKIP	[M]
SW607	EVQPAD05R	SW PLAY/PAUSE	[M]
SW608	EVQPAD05R	SW CD STOP	[M]
SW1001	K0F162B00003	SW RECORD	[M]
		CONNECTORS	
CP301	RJP3G9YA	CONNECTOR	[M]
CP601	RJP3G9YA	CONNECTOR	[M]
CP1001	RJP4G17ZA	4P CONNECTOR	[M]
CP1003	RJS10T6ZA	10P MECHA TO MAIN	[M]
CS306A	RJS2A5625-1	25P CONNECTOR	[M]
CS306B	RJS2A5725-1	25P CONNECTOR	[M]
CS307A	RJS2A8616	16P FFC CONNECTOR	[M]
CS308A	RJS1A6823-J	23P FPC CONNECTOR	[M]
CS308B	RJS1A6723-J	23P FPC CONNECTOR	[M]
		TRIMMER	
CT1	RCVFMA10T01S	TRIMMER CAPACITOR	[M]
		COILS & TRANSFORMERS	
L2	RLQY30S1W-F	FM COIL	[M]
L3	RLV2C050-0	FERRITE ANTENNA	[M]
L4	RLD4Y45-F	COIL	[M]
L6	RL02B136	AM OSC COIL	[M]
L7	RLQA101KT-G	INDUCTOR	[M]
L8	RLQY30S1W-F	FM COIL	[M]
L10	RLQAR47KT-G	COIL	[M]
L101	RLQA2R2KT-G	INDUCTOR	[M]
L127	RLQA221KT-G	INDUCTOR	[M]
L201	RLQA2R2KT-G	INDUCTOR	[M]
L221	RLQA100KT-G	INDUCTOR	[M]
L222	RLQA100KT-G	INDUCTOR	[M]
L227	RLQA221KT-G	INDUCTOR	[M]
L310	RLQA100KT-G	INDUCTOR	[M]
L340	RLL500050T-Y	INDUCTOR	[M]
L501	RLL500050T-Y	INDUCTOR	[M]
L502	RLL500050T-Y	INDUCTOR	[M]
L701	RLQA2R2KT-G	INDUCTOR	[M]
L811	RLQB3R3KT-1Y	COIL	[M]
L812	RLQB3R3KT-1Y	COIL	[M]
L1001	RL09B17	BIAS OSC COIL	[M]
T1	RLI2B019-T	AM IFT	[M]
T501	RTP1K1B010-X	TRANSFORMER	[M] ⚠
		COMPONENT COMBINATIO	
Z701	RSL5278-G	LCD	[M]
		CERAMIC FILTERS	
CF1	J0B1075A0101	FM CF	[M]
CF3	J0B1075A0103	CERAMIC FILTER	[M]
CF4	RLFCFA459L4B	AM FILTER	[M]
		OSCILLATORS	
X3	RSXD7M20C01	CRYSTAL OSCILLATOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
X801	RSXD75K0E02	CRYSTAL OSCILLATOR	[M]
X802	RSXZ16M9Z01T	CRYSTAL OSCILLATOR	[M]
		FUSES	
F501	K5D122BK0004	FUSE	[M] ⚠
		FUSE HOLDERS	
FH501	RJF0028-1	FUSECLIP	[M]
FH502	RJF0028-1	FUSECLIP	[M]
		FUSE PROTECTOR	
FP501	K5G202AA0003	FUSE PROTECTOR	[M]
		HOLDERS	
H302	RJS1A5503	3P HOLDER	[M]
H305	RJS1A5510	WIRE HOLDER	[M]
		JACKS	
JK301	RJJ37TK09	JK PHONE	[M]
JK501	RJJ1SE01-X	JK AC INLET (SW501)	[M] ⚠
		WIRES	
W301	REXX0218-1	WIRE	[M]
W302	RWJ8903135ES	REMOTE SENSOR-MAIN	[M]
W303	RWJ8902135SS	CD LEAF SW WIRE	[M]
W304	RWJ0110160SS	TUNER TO MAIN WIRE	[M]
W305	RWJ0110165QQ	DECK TO MAIN WIRE	[M]
W501	RWJ8903190SS	WIRE (W501)	[M]
W1002	RWJ9002045SC	PUSH LOCK TO MAIN	[M]
W1003	RWJ9002045SC	PUSH LOCK TO MAIN	[M]
		RESISTORS	
R2	ERDS2TJ103T	10K 1/4W	[M]
R3	ERDS2TJ332T	3.3K 1/4W	[M]
R4	ERDS2TJ331T	330 1/4W	[M]
R5	ERDS2TJ104T	100K 1/4W	[M]
R6	ERDS2TJ104T	100K 1/4W	[M]
R8	ERDS2TJ104T	100K 1/4W	[M]
R9	ERDS2TJ104T	100K 1/4W	[M]
R11	ERDS2TJ223T	22K 1/4W	[M]
R12	ERDS2TJ103T	10K 1/4W	[M]
R16	ERDS2TJ104T	100K 1/4W	[M]
R17	ERDS2TJ222T	2.2K 1/4W	[M]
R20	ERDS2TJ223T	22K 1/4W	[M]
R21	ERDS2TJ103T	10K 1/4W	[M]
R22	ERDS2TJ102T	1K 1/4W	[M]
R23	ERDS2TJ223T	22K 1/4W	[M]
R24	ERDS2TJ103T	10K 1/4W	[M]
R25	ERDS2TJ223T	22K 1/4W	[M]
R26	ERDS2TJ103T	10K 1/4W	[M]
R27	ERDS2TJ332T	3.3K 1/4W	[M]
R28	ERDS2TJ223T	22K 1/4W	[M]
R29	ERDS2TJ103T	10K 1/4W	[M]
R30	ERDS2TJ472T	4.7K 1/4W	[M]
R31	ERDS2TJ222T	2.2K 1/4W	[M]
R32	ERDS2TJ331T	330 1/4W	[M]
R33	ERDS2TJ121T	120 1/4W	[M]
R34	ERDS2TJ104T	100K 1/4W	[M]
R35	ERDS2TJ221T	220 1/4W	[M]
R108	ERDS2TJ102T	1K 1/4W	[M]
R110	ERDS2TJ272T	2.7K 1/4W	[M]
R111	ERDS2TJ822T	8.2K 1/4W	[M]
R113	ERDS2TJ183T	18K 1/4W	[M]
R115	ERDS2TJ472T	4.7K 1/4W	[M]
R116	ERDS2TJ102T	1K 1/4W	[M]
R117	ERDS2TJ471T	470 1/4W	[M]
R118	ERDS2TJ823T	82K 1/4W	[M]
R120	ERDS2TJ153T	15K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R121	ERDS2TJ471T	470 1/4W	[M]
R122	ERDS2TJ274T	270K 1/4W	[M]
R123	ERDS2TJ472T	4.7K 1/4W	[M]
R126	ERDS2TJ562T	5.6K 1/4W	[M]
R127	ERDS2TJ181T	180 1/4W	[M]
R208	ERDS2TJ102T	1K 1/4W	[M]
R210	ERDS2TJ272T	2.7K 1/4W	[M]
R211	ERDS2TJ822T	8.2K 1/4W	[M]
R213	ERDS2TJ183T	18K 1/4W	[M]
R215	ERDS2TJ472T	4.7K 1/4W	[M]
R216	ERDS2TJ102T	1K 1/4W	[M]
R217	ERDS2TJ471T	470 1/4W	[M]
R218	ERDS2TJ823T	82K 1/4W	[M]
R220	ERDS2TJ153T	15K 1/4W	[M]
R221	ERDS2TJ471T	470 1/4W	[M]
R222	ERDS2TJ274T	270K 1/4W	[M]
R223	ERDS2TJ472T	4.7K 1/4W	[M]
R227	ERDS2TJ181T	180 1/4W	[M]
R301	ERD2FCVG220T	22 1/4W	[M]
R310	ERDS2TJ333T	33K 1/4W	[M]
R311	ERDS2TJ392T	3.9K 1/4W	[M]
R312	ERDS2TJ222T	2.2K 1/4W	[M]
R313	ERDS2TJ473T	47K 1/4W	[M]
R314	ERDS2TJ331T	330 1/4W	[M]
R315	ERDS2TJ122T	1.2K 1/4W	[M]
R316	ERDS2TJ331T	330 1/4W	[M]
R317	ERDS2TJ151T	150 1/4W	[M]
R319	ERDS2TJ151T	150 1/4W	[M]
R320	ERDS2TJ472T	4.7K 1/4W	[M]
R321	ERDS2TJ103T	10K 1/4W	[M]
R322	ERDS2TJ101T	100 1/4W	[M]
R323	ERDS2TJ152T	1.5K 1/4W	[M]
R324	ERDS2TJ333T	33K 1/4W	[M]
R325	ERDS2TJ103T	10K 1/4W	[M]
R326	ERDS2TJ223T	22K 1/4W	[M]
R327	ERDS2TJ223T	22K 1/4W	[M]
R328	ERDS2TJ103T	10K 1/4W	[M]
R329	ERDS2TJ152T	1.5K 1/4W	[M]
R335	ERDS2TJ103T	10K 1/4W	[M]
R336	ERDS2TJ122T	1.2K 1/4W	[M]
R357	ERDS2TJ224T	220K 1/4W	[M]
R602	ERDS2TJ102T	1K 1/4W	[M]
R603	ERDS2TJ102T	1K 1/4W	[M]
R604	ERDS2TJ152T	1.5K 1/4W	[M]
R605	ERDS2TJ222T	2.2K 1/4W	[M]
R606	ERDS2TJ332T	3.3K 1/4W	[M]
R607	ERDS2TJ472T	4.7K 1/4W	[M]
R608	ERDS2TJ822T	8.2K 1/4W	[M]
R701	ERDS2TJ100T	10 1/4W	[M]
R702	ERDS2TJ103T	10K 1/4W	[M]
R703	ERDS2TJ472T	4.7K 1/4W	[M]
R706	ERDS2TJ103T	10K 1/4W	[M]
R707	ERDS2TJ103T	10K 1/4W	[M]
R708	ERDS2TJ332T	3.3K 1/4W	[M]
R709	ERDS2TJ104T	100K 1/4W	[M]
R710	ERDS2TJ223T	22K 1/4W	[M]
R712	ERDS2TJ273T	27K 1/4W	[M]
R713	ERDS2TJ224T	220K 1/4W	[M]
R714	ERDS2TJ393T	39K 1/4W	[M]
R715	ERDS2TJ102T	1K 1/4W	[M]
R716	ERDS2TJ273T	27K 1/4W	[M]
R720	ERDS2TJ104T	100K 1/4W	[M]
R733	ERDS2TJ103T	10K 1/4W	[M]
R735	ERDS2TJ103T	10K 1/4W	[M]
R736	ERDS2TJ153T	15K 1/4W	[M]
R737	ERDS2TJ102T	1K 1/4W	[M]
R738	ERDS2TJ303T	30K 1/4W	[M]
R740	ERDS2TJ103T	10K 1/4W	[M]
R743	ERDS2TJ124T	120K 1/4W	[M]
R745	ERDS2TJ472T	4.7K 1/4W	[M]
R746	ERDS2TJ472T	4.7K 1/4W	[M]
R747	ERDS2TJ392T	3.9K 1/4W	[M]
R748	ERDS2TJ272T	2.7K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R749	ERDS2TJ153T	15K 1/4W	[M]
R750	ERDS2TJ104T	100K 1/4W	[M]
R751	ERDS2TJ472T	4.7K 1/4W	[M]
R752	ERDS2TJ513T	51K 1/4W	[M]
R753	ERDS2TJ153T	15K 1/4W	[M]
R754	ERDS2TJ272T	2.7K 1/4W	[M]
R755	ERDS2TJ224T	220K 1/4W	[M]
R756	ERDS2TJ103T	10K 1/4W	[M]
R757	ERDS2TJ511T	510 1/4W	[M]
R761	ERDS2TJ823T	82K 1/4W	[M]
R762	ERDS2TJ102T	1K 1/4W	[M]
R763	ERDS2TJ155T	1.5M 1/4W	[M]
R764	ERDS2TJ104T	100K 1/4W	[M]
R765	ERDS2TJ105T	1M 1/4W	[M]
R766	ERDS2TJ333T	33K 1/4W	[M]
R767	ERDS2TJ153T	15K 1/4W	[M]
R768	ERDS2TJ102T	1K 1/4W	[M]
R769	ERDS2TJ101T	100 1/4W	[M]
R770	ERDS2TJ103T	10K 1/4W	[M]
R773	ERDS2TJ822T	8.2K 1/4W	[M]
R774	ERDS2TJ513T	51K 1/4W	[M]
R775	ERDS2TJ153T	15K 1/4W	[M]
R777	ERDS2TJ104T	100K 1/4W	[M]
R778	ERDS2TJ472T	4.7K 1/4W	[M]
R779	ERDS2TJ822T	8.2K 1/4W	[M]
R780	ERDS2TJ102T	1K 1/4W	[M]
R783	ERDS2TJ102T	1K 1/4W	[M]
R784	ERDS2TJ102T	1K 1/4W	[M]
R785	ERDS2TJ103T	10K 1/4W	[M]
R786	ERDS2TJ334T	330K 1/4W	[M]
R787	ERDS2TJ334T	330K 1/4W	[M]
R788	ERDS2TJ103T	10K 1/4W	[M]
R789	ERDS2TJ103T	10K 1/4W	[M]
R790	ERDS2TJ103T	10K 1/4W	[M]
R791	ERDS2TJ103T	10K 1/4W	[M]
R792	ERDS2TJ472T	4.7K 1/4W	[M]
R801	ERDS2TJ473T	47K 1/4W	[M]
R802	ERDS2TJ473T	47K 1/4W	[M]
R803	ERDS2TJ473T	47K 1/4W	[M]
R804	ERDS2TJ103T	10K 1/4W	[M]
R831	ERDS2TJ103T	10K 1/4W	[M]
R837	ERDS2TJ333T	33K 1/4W	[M]
R841	ERDS2TJ102T	1K 1/4W	[M]
R842	ERDS2TJ102T	1K 1/4W	[M]
R845	ERDS2TJ102T	1K 1/4W	[M]
R951	ERDS2TJ103T	10K 1/4W	[M]
R952	ERDS2TJ103T	10K 1/4W	[M]
R953	ERDS2TJ103T	10K 1/4W	[M]
R954	ERDS2TJ103T	10K 1/4W	[M]
R955	ERDS2TJ103T	10K 1/4W	[M]
R1001	ERDS2TJ221T	220 1/4W	[M]
R1002	ERDS2TJ331T	330 1/4W	[M]
R1003	ERDS2TJ473T	47K 1/4W	[M]
R1004	ERDS2TJ8R2T	8.2 1/4W	[M]
R1005	ERDS2TJ223T	22K 1/4W	[M]
R1006	ERDS2TJ101T	100 1/4W	[M]
R1101	ERDS2TJ183T	18K 1/4W	[M]
R1102	ERDS2TJ272T	2.7K 1/4W	[M]
R1103	ERDS2TJ224T	220K 1/4W	[M]
R1104	ERDS2TJ562T	5.6K 1/4W	[M]
R1105	ERDS2TJ222T	2.2K 1/4W	[M]
R1106	ERDS2TJ680T	68 1/4W	[M]
R1201	ERDS2TJ183T	18K 1/4W	[M]
R1202	ERDS2TJ272T	2.7K 1/4W	[M]
R1203	ERDS2TJ224T	220K 1/4W	[M]
R1204	ERDS2TJ562T	5.6K 1/4W	[M]
R1205	ERDS2TJ222T	2.2K 1/4W	[M]
R1206	ERDS2TJ680T	68 1/4W	[M]
		CAPACITORS	
C1	ECBT1H470J5	47P 50V	[M]
C2	ECBT1H100JC5	10P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C3	ECFR1C223MR	0.022 16V	[M]
C4	ECBT1H102KB5	1000P 50V	[M]
C5	ECBT1H2R2KC5	2.2P 50V	[M]
C6	ECBT1H102KB5	1000P 50V	[M]
C7	ECBT1H150JC5	15P 50V	[M]
C8	RCBS1H102KBY	1000P 50V	[M]
C9	ECBT1H102KB5	1000P 50V	[M]
C10	ECBT1H3R3KC5	3.3P 50V	[M]
C11	ECBT1H102KB5	1000P 50V	[M]
C12	ECBT1H331KB5	330P 50V	[M]
C13	ECA1HM100BV	10 50V	[M]
C14	ECBT1H102KB5	1000P 50V	[M]
C15	ECFR1C683KR	0.068 16V	[M]
C16	ECFR1C823MR	0.082 16V	[M]
C17	ECFR1C823MR	0.082 16V	[M]
C18	ECFR1C333KR	0.033 16V	[M]
C19	ECFR1C333KR	0.033 16V	[M]
C20	RCE1HM010BP	1P 50V	[M]
C21	RCE1HM010BP	1P 50V	[M]
C22	ECA1HMR47BV	0.47 50V	[M]
C23	ECFR1C333KR	0.033 16V	[M]
C24	ECFR1C333KR	0.033 16V	[M]
C25	ECQP2A621JZT	620P 100V	[M]
C26	ECA1HM4R7BV	4.7 50V	[M]
C30	ECBT1H331KB5	330P 50V	[M]
C31	ECBT1C103MS5	0.01 16V	[M]
C32	ECBT1H102KB5	1000P 50V	[M]
C33	ECBT1H102KB5	1000P 50V	[M]
C34	ECBT1H102KB5	1000P 50V	[M]
C35	ECA1AM101BV	100 10V	[M]
C36	ECA1AM101BV	100 10V	[M]
C37	ECBT1C103MS5	0.01 16V	[M]
C38	ECBT1H101KB5	100P 50V	[M]
C39	ECBT1H120JC5	12P 50V	[M]
C40	ECBT1C222KR5	2200P 16V	[M]
C41	ECBT1H101KB5	100P 50V	[M]
C42	ECBT1H180JC5	18P 50V	[M]
C43	ECBT1H101KB5	100P 50V	[M]
C44	ECA1HM2R2BV	2.2P 50V	[M]
C45	ECBT1H102KB5	1000P 50V	[M]
C47	ECFR1C104KR	0.1 16V	[M]
C48	RCE1HM010BP	1P 50V	[M]
C49	ECBT1H102KB5	1000P 50V	[M]
C50	ECBT1H102KB5	1000P 50V	[M]
C51	RCE1HM010BP	1P 50V	[M]
C54	ECBT1H102KB5	1000P 50V	[M]
C56	ECBT1H102KB5	1000P 50V	[M]
C57	ECBT1H223KB5	0.022 50V	[M]
C58	ECBT1H102KB5	1000P 50V	[M]
C61	ECBT1H221KB5	220P 50V	[M]
C101	RCE1HM010BP	1P 50V	[M]
C109	ECA1HM0R1BV	0.1 50V	[M]
C110	RCE1HMR22BP	0.22P 50V	[M]
C112	RCE1HM2R2BP	2.2P 50V	[M]
C113	ECBT1H560J5	56P 50V	[M]
C114	ECBT1H102KB5	1000P 50V	[M]
C115	RCE1HM010BP	1P 50V	[M]
C116	ECBT1H102KB5	1000P 50V	[M]
C118	ECBT1C332KR5	3300P 16V	[M]
C120	ECA1AM471B	470 10V	[M]
C124	ECBT1C332MR5	3300P 16V	[M]
C130	ECBT1H153KB5	0.015 50V	[M]
C201	RCE1HM010BP	1P 50V	[M]
C209	ECA1HM0R1BV	0.1 50V	[M]
C210	RCE1HMR22BP	0.22P 50V	[M]
C212	RCE1HM2R2BP	2.2P 50V	[M]
C213	ECBT1H560J5	56P 50V	[M]
C214	ECBT1H102KB5	1000P 50V	[M]
C215	RCE1HM010BP	1P 50V	[M]
C216	ECBT1H102KB5	1000P 50V	[M]
C217	ECA1AM101BV	100 10V	[M]
C218	ECBT1C332KR5	3300P 16V	[M]
C220	ECA1AM471B	470 10V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C222	ECBT1C332MR5	3300P 16V	[M]
C230	ECBT1H153KB5	0.015 50V	[M]
C301	ECA1EM470BV	47 25V	[M]
C313	ECBT1H561KB5	560P 50V	[M]
C314	ECA1EM470BV	47 25V	[M]
C315	ECBT1H102KB5	1000P 50V	[M]
C316	ECA1AM101BV	100 10V	[M]
C317	ECA1EM222EV	2200 25V	[M]
C318	RCE1CM220BP	22 16V	[M]
C319	ECBT1H102KB5	1000P 50V	[M]
C320	RCE1CM220BP	22 16V	[M]
C323	RCE1CM220BP	22 16V	[M]
C324	ECBT1H102KB5	1000P 50V	[M]
C325	ECEA1CKA101B	100 16V	[M]
C327	ECBT1H102KB5	1000P 50V	[M]
C330	ECFR1C104KR	0.1 16V	[M]
C331	ECA1HM4R7BV	4.7 50V	[M]
C333	ECBT1E103ZF5	0.01 25V	[M]
C335	RCQB2A102JTM	1000P 100V	[M]
C501	ECKR1H103ZF5	0.01 50V	[M]
C502	ECKR1H103ZF5	0.01 50V	[M]
C503	ECKR1H103ZF5	0.01 50V	[M]
C504	ECKR1H103ZF5	0.01 50V	[M]
C614	ECA1HM3R3BV	3.3 50V	[M]
C701	ECBT1H104KB5	0.1 50V	[M]
C702	ECEA1AKA101B	100 10V	[M]
C703	ECEA1HKA010B	1 50V	[M]
C704	ECBT1H103KB5	0.01 50V	[M]
C705	ECEA1CKA470B	47 16V	[M]
C706	ECBT1H270J5	27P 50V	[M]
C707	ECBT1C392KR5	3900P 16V	[M]
C708	ECBT1H105ZF5	1 50V	[M]
C709	ECBT1H471KB5	470P 50V	[M]
C710	ECBT1H104KB5	0.1 50V	[M]
C711	ECBT1H104KB5	0.1 50V	[M]
C714	ECA1HM0R1BV	0.1 50V	[M]
C715	ECA1HM100BV	10 50V	[M]
C716	ECA1CM330BV	33 16V	[M]
C717	RCE1HM2R2BP	2.2P 50V	[M]
C718	ECA1HM100BV	10 50V	[M]
C719	RCE1HM010BP	1P 50V	[M]
C720	ECA1HM3R3BV	3.3 50V	[M]
C721	RCE1HM2R2BP	2.2P 50V	[M]
C722	RCE1CM220BP	22 16V	[M]
C723	ECA1HMR47BV	0.47 50V	[M]
C724	RCE1CM220BP	22 16V	[M]
C725	RCE1HM2R2BP	2.2P 50V	[M]
C726	ECEA1AKA221I	220 10V	[M]
C728	ECEA1HKA2R2B	2.2 50V	[M]
C729	ECBT1H105ZF5	10 50V	[M]
C730	ECEA1CKA470B	47 16V	[M]
C731	ECBT1H3R3KC5	3.3P 50V	[M]
C733	ECBT1H104KB5	0.1 50V	[M]
C742	ECA1HM0R1BV	0.1 50V	[M]
C743	ECQV1H474JZ3	0.47 50V	[M]
C744	ECBT1E473ZF5	0.047 25V	[M]
C745	RCQB2A103KTM	0.01 100V	[M]
C746	ECBT1C103MS5	0.01 16V	[M]
C747	ECBT1C103MS5	0.01 16V	[M]
C748	ECQV1H224JZ3	0.22 50V	[M]
C749	ECBT1C103MS5	0.01 16V	[M]
C750	ECBT1H102KB5	1000P 50V	[M]
C751	ECFR1C104KR	0.1 16V	[M]
C752	ECBT1H333KB5	0.033 50V	[M]
C753	ECQV1H224JZ3	0.22 50V	[M]
C754	ECBT1H471KB5	470P 50V	[M]
C755	ECBT1H102KB5	1000P 50V	[M]
C756	RCE1HMR22BP	0.22P 50V	[M]
C757	ECFR1C104KR	0.1 16V	[M]
C758	ECBT1H270J5	27P 50V	[M]
C759	ECBT1H220J5	22P 50V	[M]
C760	ECBT1H220J5	22P 50V	[M]
C761	ECBT1H220J5	22P 50V	[M]
C762	ECBT1H220J5	22P 50V	[M]
C767	ECBT1H153KB5	0.015 50V	[M]
C768	ECBT1C682KR5	6800P 16V	[M]
C769	ECQV1H474JZ3	0.47 50V	[M]
C774	ECFR1C104KR	0.1 16V	[M]
C775	ECA1EM470BV	47 25V	[M]
C777	ECBT1H104KB5	0.1 50V	[M]
C778	ECBT1H104KB5	0.1 50V	[M]
C780	ECBT1H561KB5	560 50V	[M]
C781	ECBT1C103MS5	0.01 16V	[M]
C783	RCQB2A102JTM	1000P 100V	[M]
C784	ECBT1C103MS5	0.01 16V	[M]
C802	ECBT1H102KB5	1000P 50V	[M]
C804	ECFR1C104KR	0.1 16V	[M]
C807	ECBT1H102KB5	1000P 50V	[M]
C808	ECBT1H102KB5	1000P 50V	[M]
C810	ECBT1H102KB5	1000P 50V	[M]
C811	ECBT1H102KB5	1000P 50V	[M]
C951	ECBT1H220JC5	22 50V	[M]
C952	ECBT1H4R7KC5	4.7 50V	[M]
C953	ECBT1H4R7KC5	4.7 50V	[M]
C954	ECEA1HKA100B	10 50V	[M]
C955	ECEA1HKA100B	10 50V	[M]
C1001	RCQB2A392KM	3900P 100V	[M]
C1002	RCE1AM101BP	100P 10V	[M]
C1003	ECBT1C682MR5	6800P 16V	[M]
C1004	ECBT1H102KB5	1000P 50V	[M]
C1006	ECEA1HKA2R2B	2.2 50V	[M]
C1007	RCE1AM101BP	100P 10V	[M]
C1008	ECA1AM221BV	220 10V	[M]
C1101	ECBT1C272MR5	2700P 16V	[M]
C1102	ECA1CM100BV	10P 16V	[M]
C1103	ECBT1H223KB5	0.022 50V	[M]
C1104	RCE1AM101BP	100P 10V	[M]
C1106	ECBT1H102KB5	1000P 50V	[M]
C1122	ECBT1C332MR5	3300P 16V	[M]
C1201	ECBT1C272MR5	2700P 16V	[M]
C1202	ECA1CM100BV	10 16V	[M]
C1203	ECBT1H223KB5	0.022 50V	[M]
C1204	RCE1AM101BP	100P 10V	[M]
C1206	ECBT1H102KB5	1000P 50V	[M]
C1222	ECBT1C332MR5	3300P 16V	[M]

17.4. Packing Materials & Accessories Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPGX1044	PACKING CASE	[M] EB-S EG-S
P1	RPGX1045	PACKING CASE	[M] EB-A EG-A
P1	RPGX1048	PACKING CASE	[M] E-S
P1	RPGX1049	PACKING CASE	[M] E-A
P2	RPNX0166	POLYFOAM	[M]
P3	RPH0131	MIRAMAT SHEET	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		ACCESSORIES	
A1	RJA0019-2K	AC CORD (SF)	[M] EG-A E-A ⚠
A1	RJA0053-2X	AC CORD (SF)	[M] EB-S ⚠
A2	RQT6744-B	O/I BOOK (En)	[M] EB-S E-S
A2	RQT6745-D	O/I BOOK (Ge/It/Fr)	[M] EG
A2	RQT6746-H	O/I BOOK (Du/Da/Sw)	[M] EG
A2	RQT6747-E	O/I BOOK (Sp/Ru/Cz/Po)	[M] E

17.5. Packaging