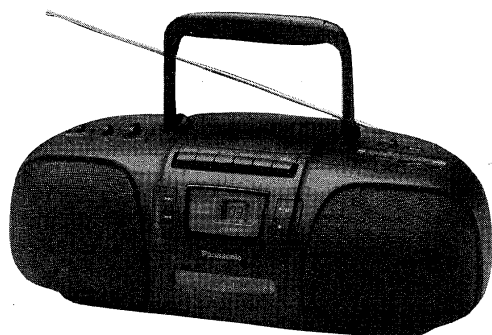


Service Manual

Portable Stereo CD System

Radio Cassette

RX-DS7
COMPACT
disc
DIGITAL AUDIO

Colour

(K) : Black

Areas

Suffix for Model No.	Area	Colour
(P)	U. S. A.	(K)

Tape Deck: New Mechanism Series
Traverse Deck: New Mechanism Series

■ Specifications**Radio :****Frequency Range:**

FM 88 – 108 MHz
AM 525 – 1705 kHz

Intermediate Frequency:

FM 10.7 MHz
AM 455 kHz

Sensitivity:

FM 2.8 μ V/ 50 mW H.P. output
 (-3 dB Limit Sens.)
AM 112 μ V/m/ 50 mW H.P. output (Max.)

CD Player:**Sampling Frequency:** 44.1 kHz**Decoding:** 16-bit linear
Beam Source: Semiconductor laser
 (wavelength: 780 nm)
No. of Channels: 2 channels, stereo**Wow and Flutter:** Less than possible measurement data**Tape Recorder :****Track System:** 4-track, 2-channel, stereo**Recording System:**

AC bias

Erasing System:

Multi pole magnet

Monitor System:

Variable sound monitor

Frequency Range:**Normal** 80 – 10000 Hz**Tape Speed:**

4.8 cm/s

General:**Power Requirement****AC** 120 V, 60 Hz**Battery** 9 V (Six "D" size, R20 / LR20 batteries)**Power Consumption** 20 W**Power Output** 3 W \times 2 (max.)**Speakers** 10 cm (4") \times 2, 3.2 Ω **Jack****Output** PHONES: 2.0 mW, 32 Ω , ϕ 3.5
Dimensions: 430 (W) \times 161 (H) \times 231 (D) mm
 (16¹⁵/₁₆" \times 6⁵/₁₆" \times 9¹/₈")
Weight: 3.1 kg (6 lb. 13 oz.) without batteries**Notes:**

1. Weight and dimensions shown are approximate.
2. Design and specifications are subject to change without notice.

⚠ 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.

Panasonic®

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Schematic Diagram	15~19		

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.

Precaution of Laser Diode

CAUTION: This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pick up lens.

Wave length: 780 nm

Maximum output radiation power from pick up: 100 μ W/VDE

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

1. Do not disassemble the 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.

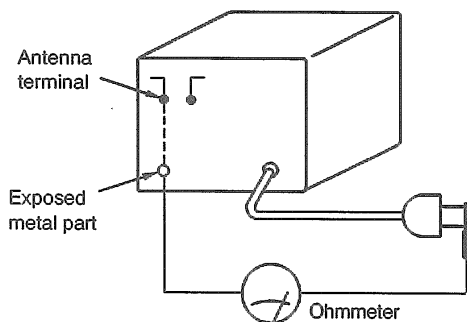
Safety Precaution

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

● INSULATION RESISTANCE TEST

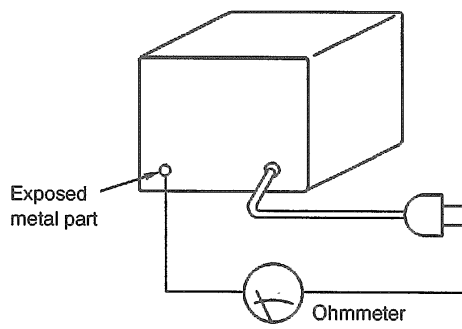
1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between 3 M Ω and 5.2 M Ω to all exposed parts. (Fig. A) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. B)

Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.



(Fig. A)

Resistance = 3 M Ω — 5.2 M Ω

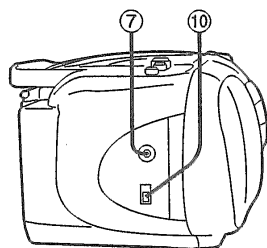
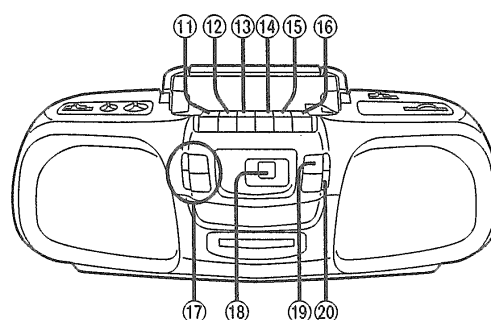
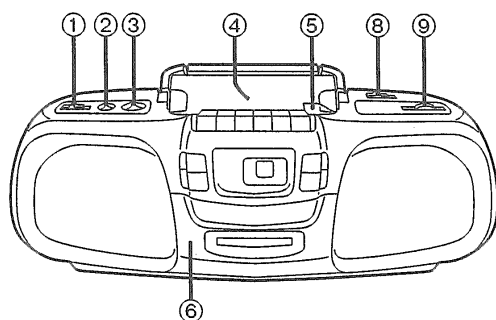


(Fig. B)

Resistance = Approx. ∞

4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

■ Location of Control



BATTERY SERVICE LIFE

D-size Batteries

Approx. 50 hours of FM/AM mode (EIAJ)

Approx. 12 hours of tape playback mode (EIAJ)

Approx. 25 hours of tape recording mode (EIAJ)

Approx. 5 hours of CD playback mode (EIAJ)

The above battery service life is measured according to the conditions set forth by EIAJ (Electronic Industries Association of Japan). As the battery service life varies with the method of operation and environmental conditions, use these values as reference.

No.	Name
-----	------

Basic controls

- | | |
|---|---|
| ① | Function selector/operation switch (SELECTOR) |
| ② | Tone control (TONE) |
| ③ | Volume control (VOLUME) |
| ④ | Disc lid |
| ⑤ | Disc lid open button (CD ▲) |
| ⑥ | Cassette lid |
| ⑦ | Headphones jack (PHONES) |

Tuner controls

- | | |
|---|--|
| ⑧ | Band switch (BAND) |
| ⑨ | Tuning dial (TUNING) |
| ⑩ | FM mode/beat proof switch (FM MODE/BP) |

No.	Name
-----	------

Cassette deck controls

- | | |
|---|------------------------------------|
| ⑪ | Pause button (PAUSE) |
| ⑫ | Stop/eject button (■/▲ STOP/EJECT) |
| ⑬ | Fast forward button (◀◀ FF) |
| ⑭ | Rewind button (▶▶ REW) |
| ⑮ | Playback button (◀ PLAY) |
| ⑯ | Recording button (● [REC]) |

CD controls

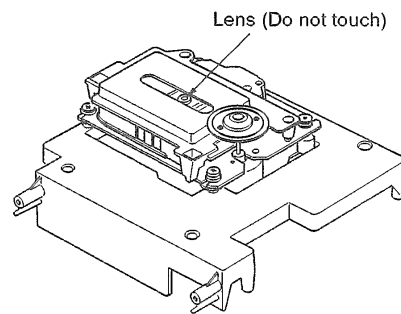
- | | |
|---|------------------------------|
| ⑰ | Skip/search buttons (◀◀, ▶▶) |
| ⑱ | Display panel |
| ⑲ | Play/pause button (▶/) |
| ⑳ | Stop button (■) |

■ 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.

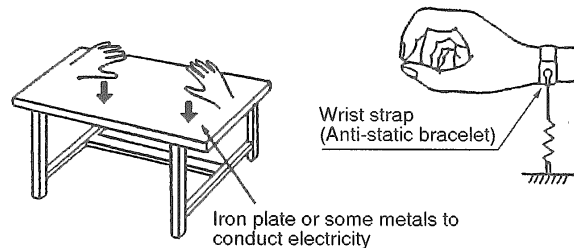


◆ Grounding for electrostatic breakdown prevention

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).



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

■ Operation Check and Main Component Replacement Procedures

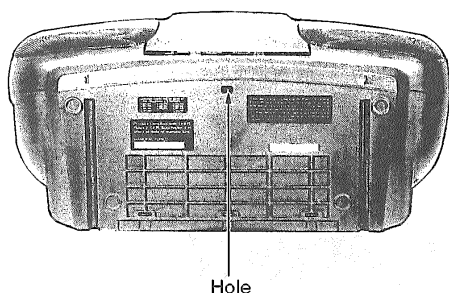
NOTE

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. Illustrated screws are equivalent to actual size.
5. Refer the parts No. on the page of "Main Component Replacement Procedures", if necessary.

◆ Contents

	Page.
• Measure for tape trouble	5.
• Checking Procedure for each P.C.B.	
1. Checking for the tuner P.C.B..	5,6.
2. Checking for the main P.C.B..	6,7.
• Main Component Replacement Procedures	
1. Replacement for the mechanism.	7.
2. Replacement for the traverse ass'y.	8.
3. Replacement for the CD cover.	9.
4. Replacement for the cassette lid and cassette holder.	10,11.
5. Replacement for the handle.	12.
• Point "0" Adjustment	12.

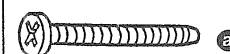
■ Measure for tape trouble



● If a cassette tape can not be removed from the deck since it is caught by the capstan or pinch roller insert a thin driver into the hole in the bottom side of this unit and remove the winded tape with rotating the flywheel in the direction of arrow.

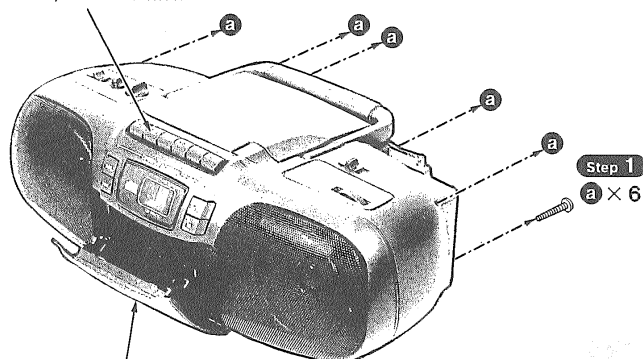
■ Checking procedure for each P.C.B.

1. Checking for the tuner P.C.B.



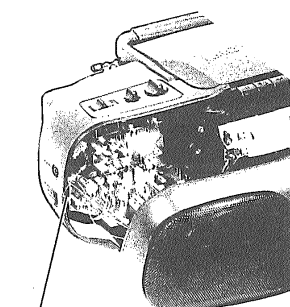
[XTV3+20G]

STOP/EJECT button

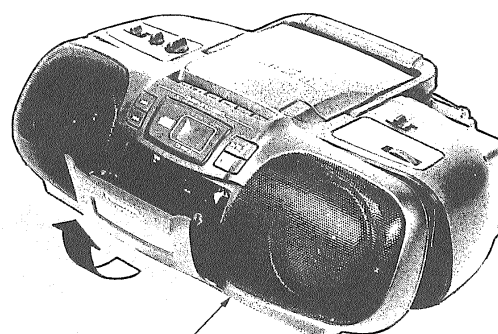


Step 2

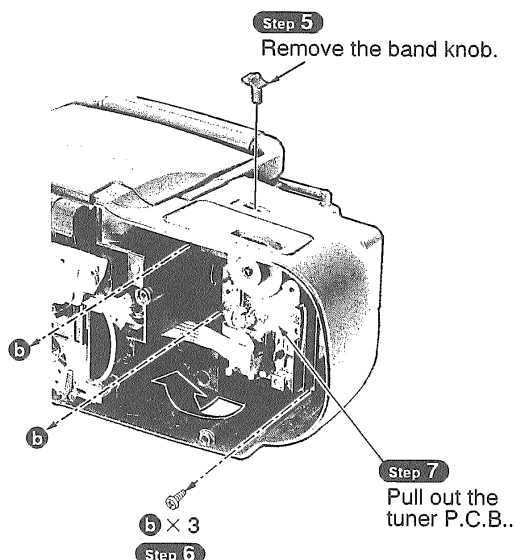
Push the STOP/EJECT button, and then open the cassette lid ass'y.



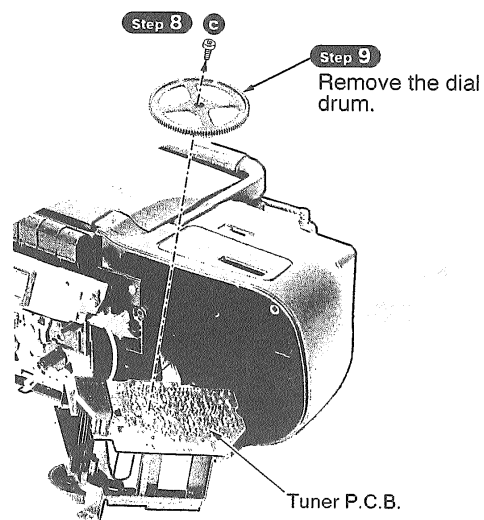
Remove the connector (CN206).



Remove the front panel ass'y in the direction of arrow.

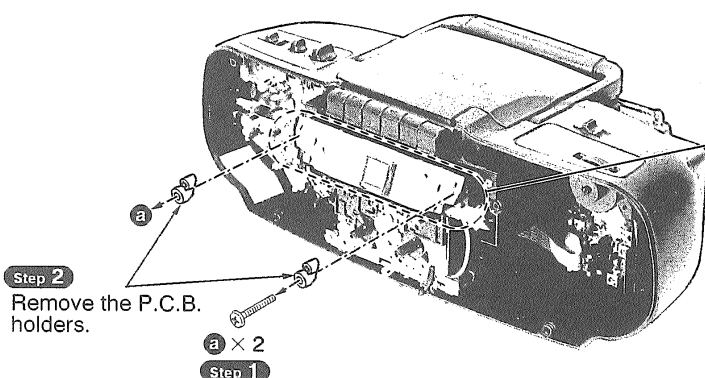


• Check the tuner P.C.B. as shown below.

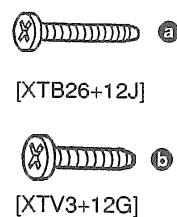
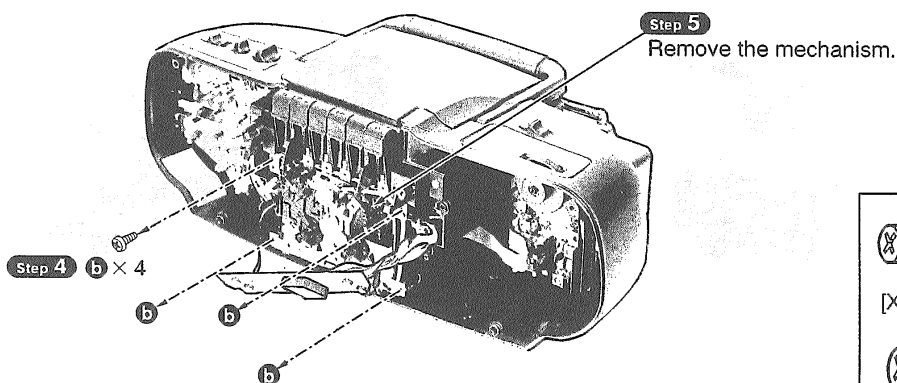
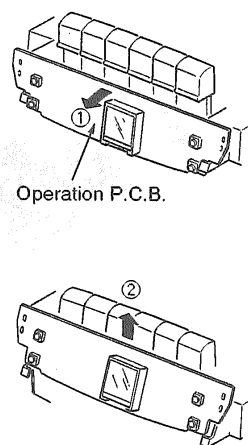


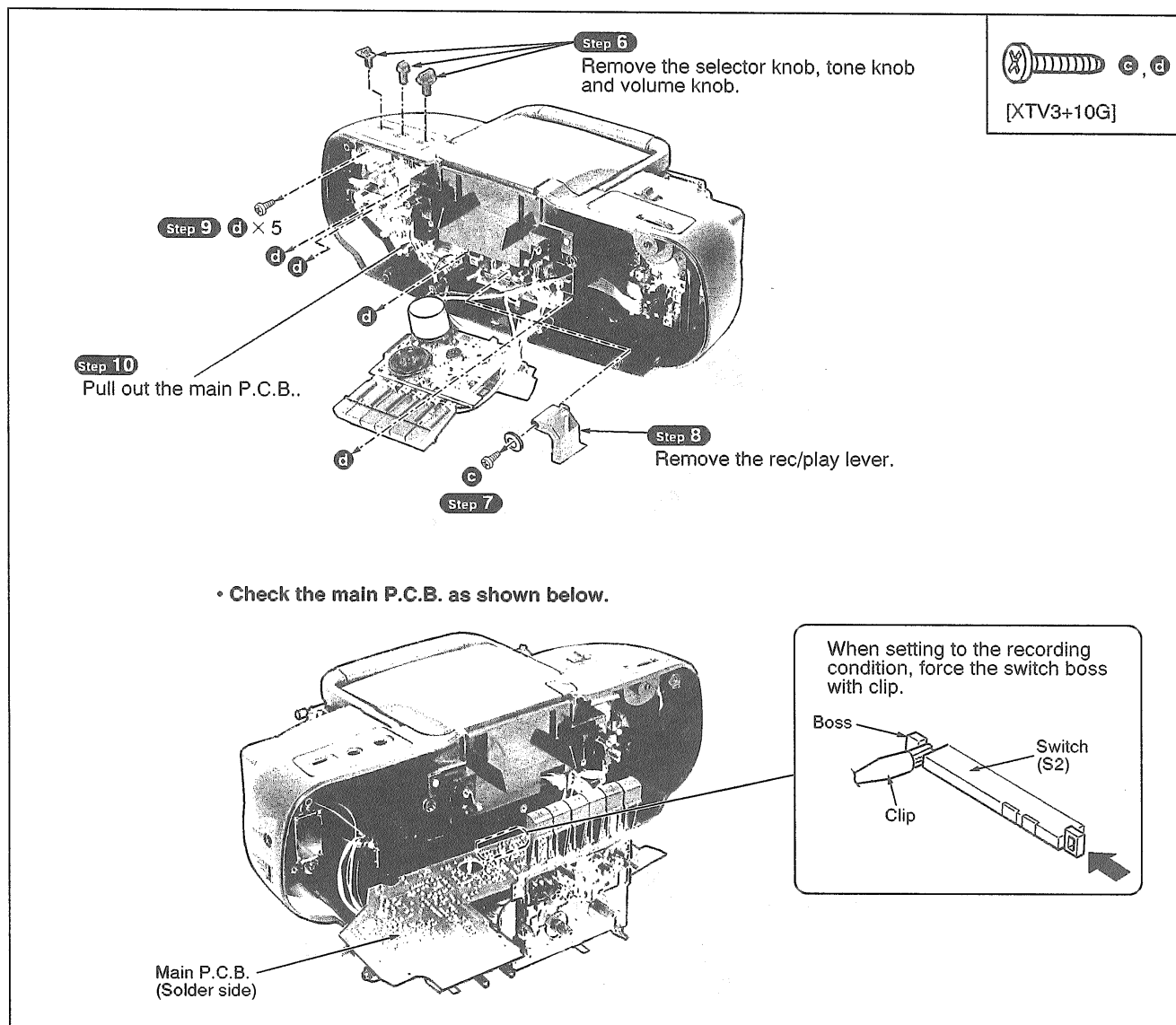
2. Checking for the main P.C.B.

• Follow the item 1 (**Step 1** ~ **Step 4**) in checking procedures for each P.C.B. on page 5.



Step 3
Remove the operation P.C.B..



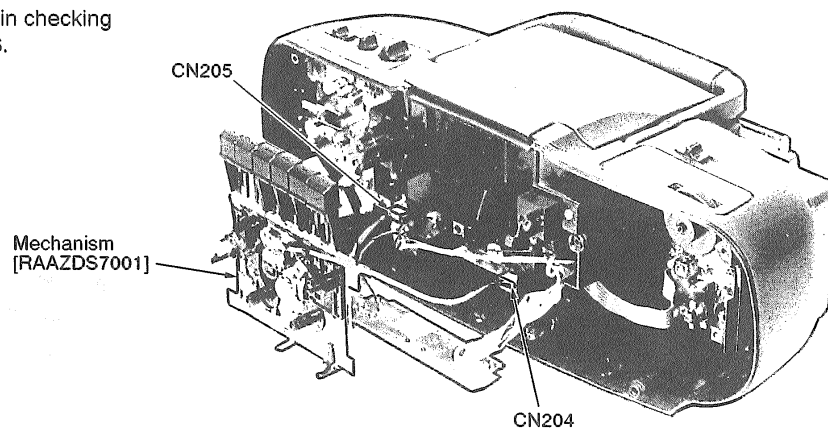


Main Component Replacement Procedures

1. Replacement for the mechanism

- Follow the item 1 (**Step 1** ~ **Step 4**) in checking procedures for each P.C.B. on page 5.
- Follow the item 2 (**Step 1** ~ **Step 5**) in checking procedures for each P.C.B. on page 6.

- Remove the 2 connectors (CN204, CN205).

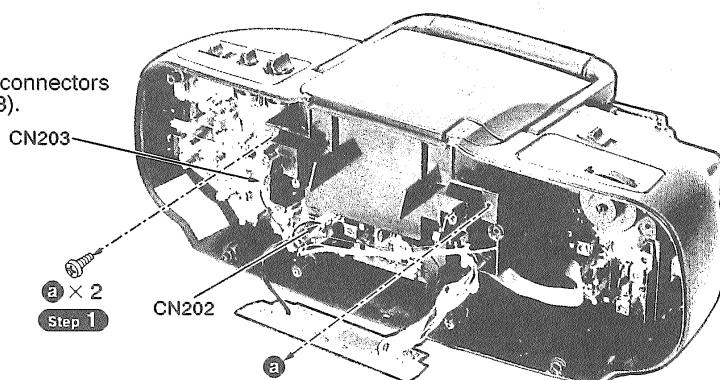


2. Replacement for the traverse ass'y

- Follow the item 1 (Step 1 ~ Step 4) in checking procedures for each P.C.B. on page 5.
- Follow the item 2 (Step 1 ~ Step 5) in checking procedures for each P.C.B. on page 6.

Step 2

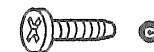
Remove the 2 connectors (CN202, CN203).



[XTB26+12J]



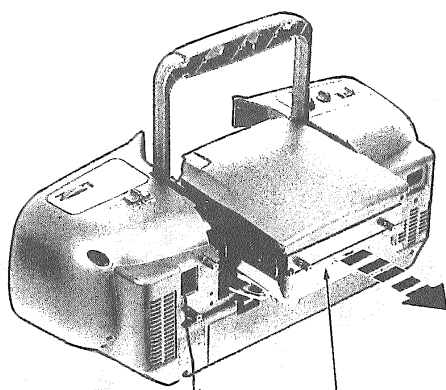
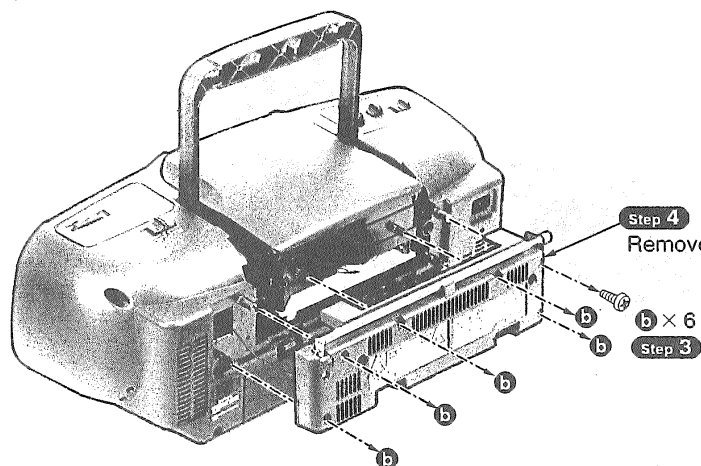
[XTB3+12JFZ]



[XTV3+10G]



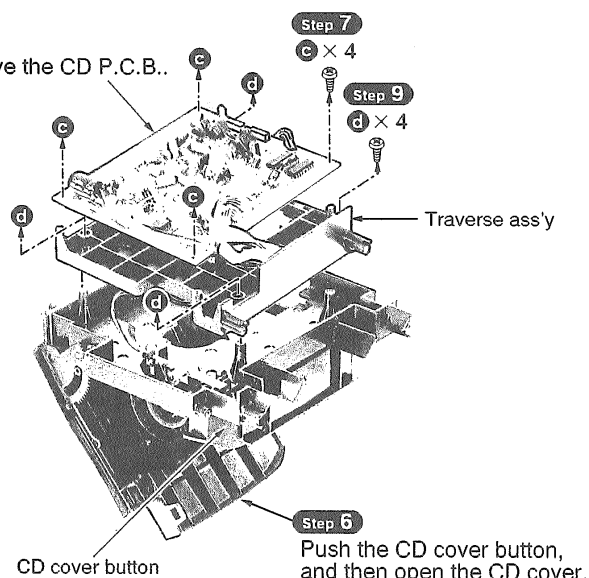
[XTV3+12G]



Step 5
Pull out the CD unit.

Step 8

Remove the CD P.C.B..

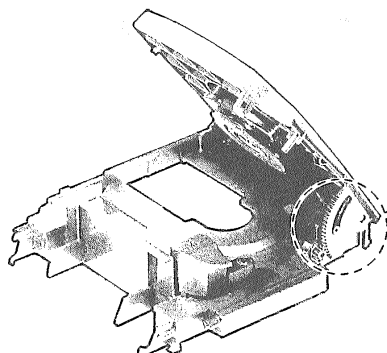
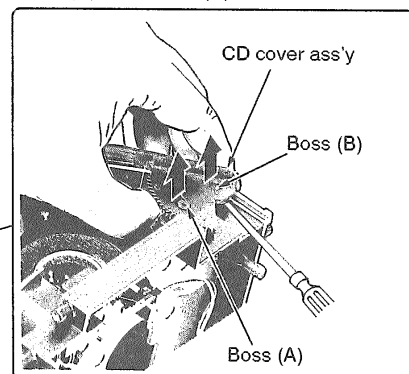


3. Replacement for the CD cover

- Follow the item 1 (Step 1 ~ Step 4) in checking procedures for each P.C.B. on page 5.
- Follow the item 2 (Step 1 ~ Step 5) in checking procedures for each P.C.B. on page 6.
- Follow the item 2 (Step 1 ~ Step 9) in main component procedures on page 8.

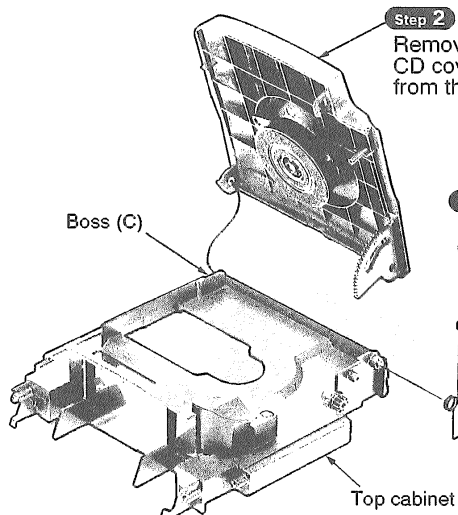
Step 1

Remove the CD cover ass'y from the boss (A) and boss (B).



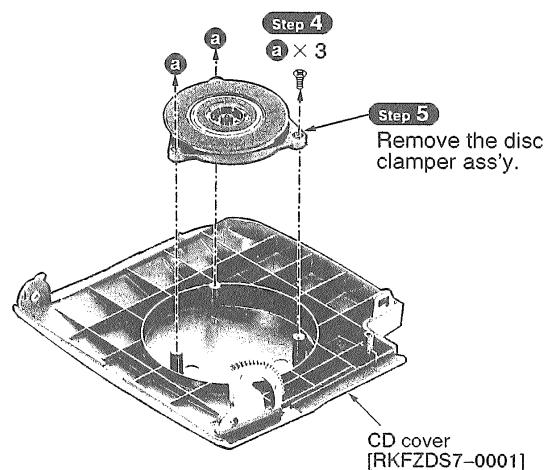
Step 2

Remove the CD cover ass'y from the boss (C).



Step 3

Remove the CD open spring.



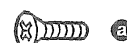
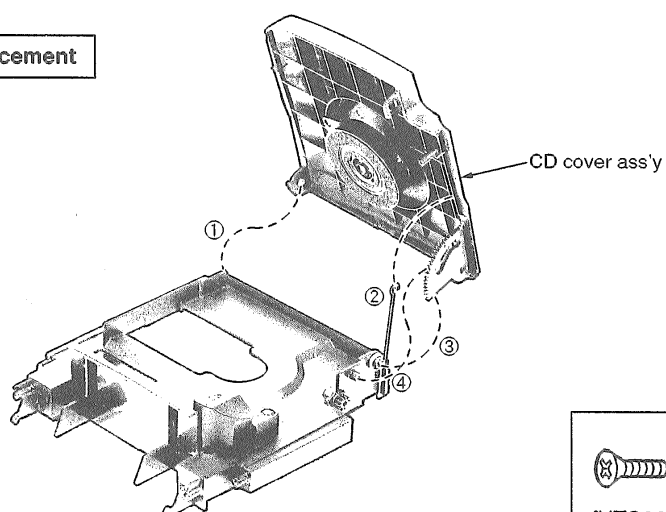
Step 4

a × 3

Step 5

Remove the disc clamper ass'y.

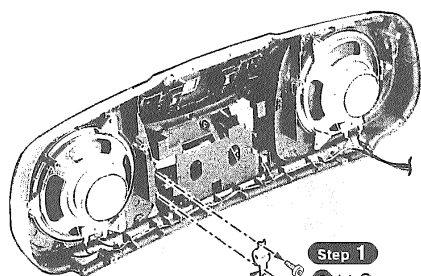
Installation of the CD cover ass'y after replacement



[XTS26+8J]

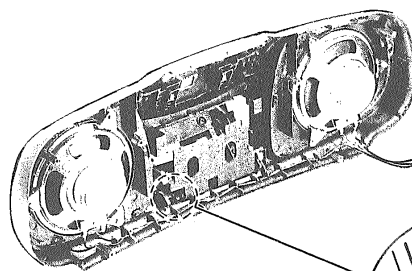
4. Replacement for the cassette lid and cassette holder

- Follow the item 1 (**Step 1** ~ **Step 4**) in checking procedures for each P.C.B. on page 5.

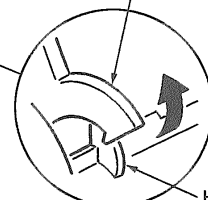


Step 1
a × 2

Step 2
Remove the damper gear.



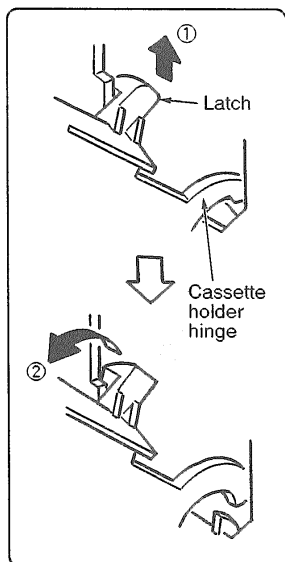
Cassette holder hinge



Hook

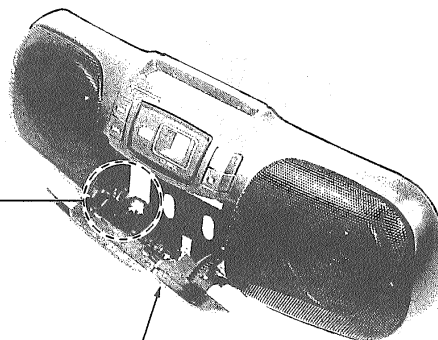
Step 3

Lift up the cassette holder hinge, and then release the hook.

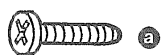


Step 4

Lift up the cassette holder, and then release the latch and cassette holder hinge.



Cassette lid ass'y



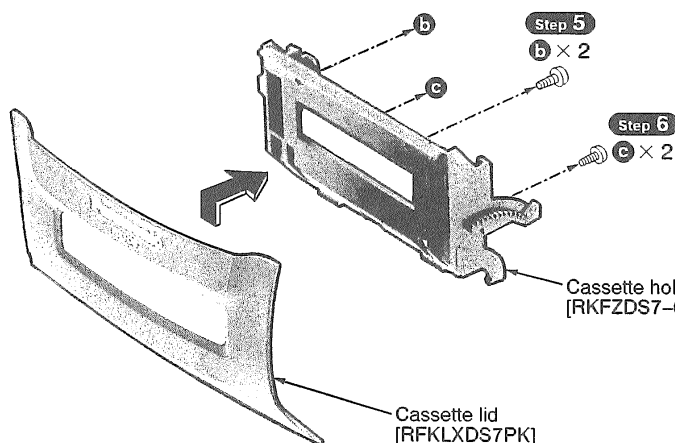
[XTV3+10G]



[XTB3+12JFZ]



[XTB26+8]



Step 5

b × 2

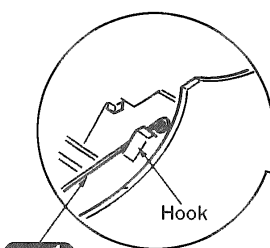
Step 6

c × 2

Cassette holder
[RKFDZS7-0003]

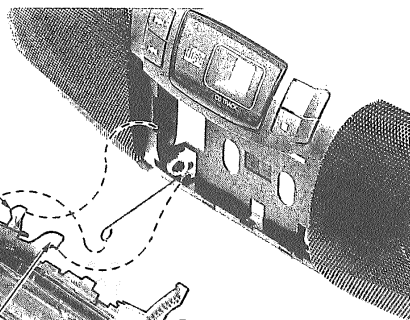
Cassette lid
[RFKLXDS7PK]

Installation of the cassette lid ass'y after replacement

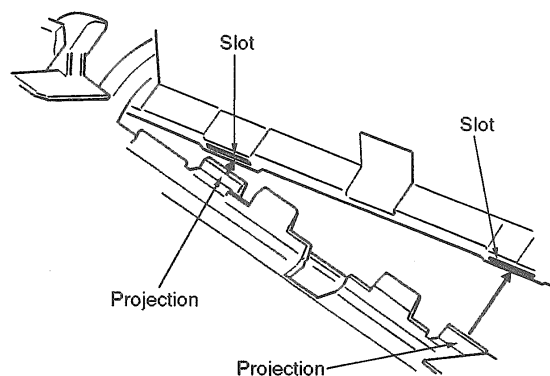
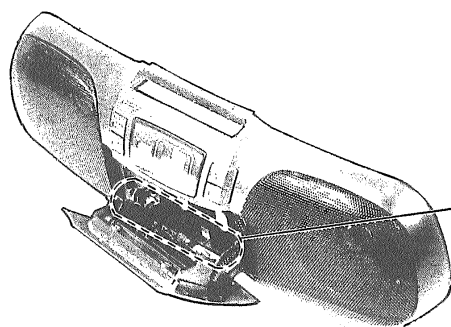


Step 1
Align the cassette spring with the hook.

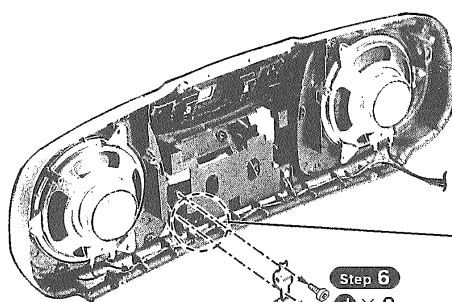
Latch
Cassette holder hinge



Step 2
Install the cassette holder hinge and latch to the front panel ass'y.



Step 3
Align the cassette holder projections with the slots of front panel ass'y.



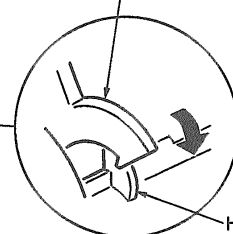
Step 5
Install the damper gear.

Step 6
d × 2



[XTV3+10G]

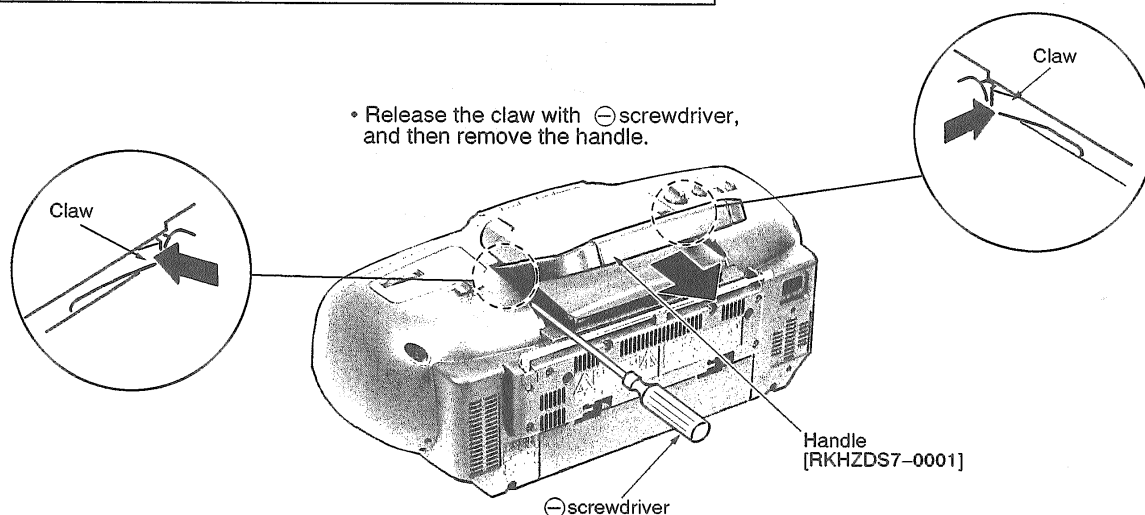
Cassette holder hinge



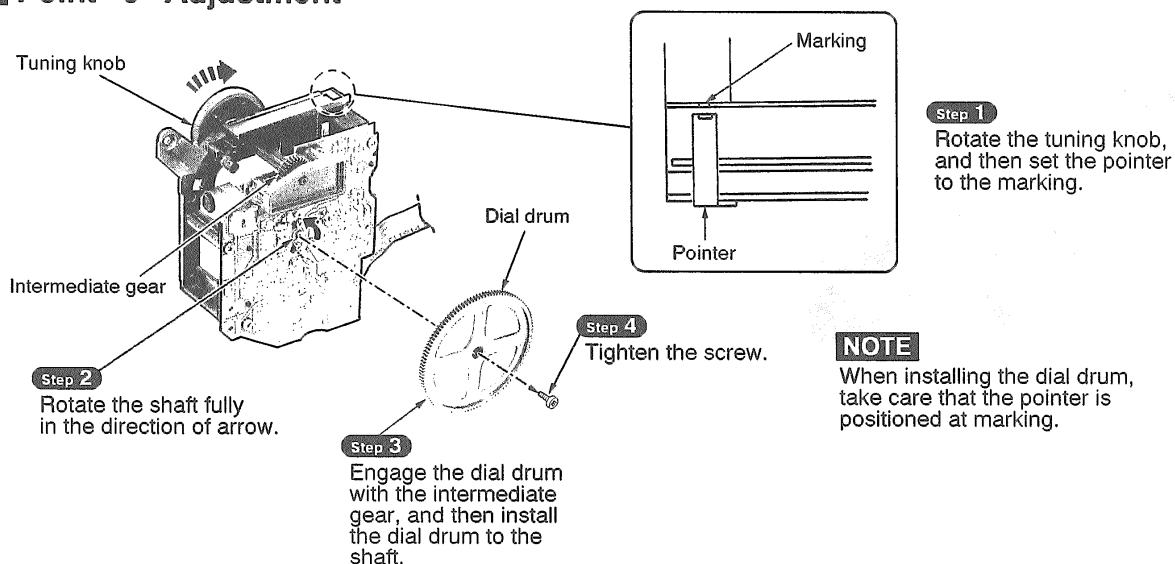
Step 4
Align the cassette holder hinge with the hook.

Hook

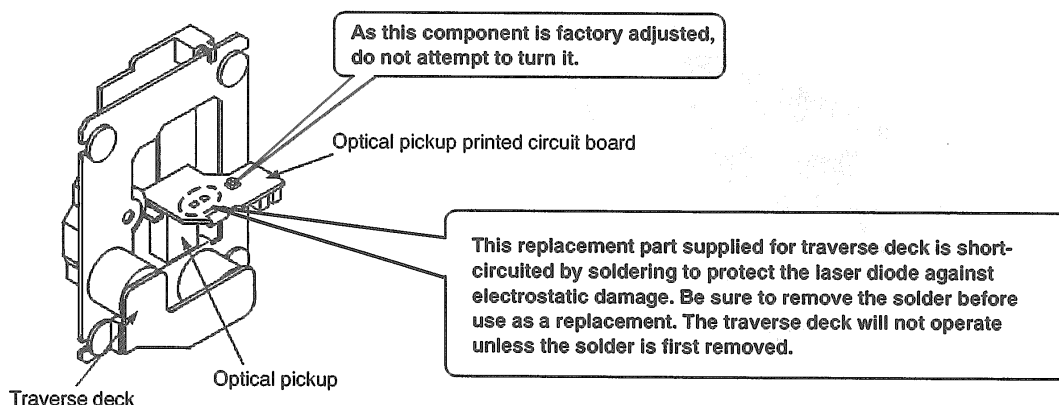
5. Replacement for the handle



Point "0" Adjustment



Precautions when Replacing the Traverse Deck



The illustration shows a view of the traverse deck from below.

Measurements and Adjustments

< TUNER SECTION >

● ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT					
<ul style="list-style-type: none"> Set function selector/operation switch to RADIO. Set band select switch to FM or AM. Set FM mode switch to STEREO. 			<ul style="list-style-type: none"> Set volume control to maximum. Output of signal generator should be no higher than necessary to obtain an output reading. 		

● FM ALIGNMENT

The parts other than the ones listed below are aligned at the factory before they are supplied. Therefore, alignment of those parts is unnecessary when used for replacement.

SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT (Shown in Fig.1)	REMARKS
CONNECTIONS	FREQUENCY				
FM-IF ALIGNMENT					
Connect to test point TP2 through FM dummy antenna. Negative side to test point TP3 .	10.7 MHz	Tuning capacitor fully closed.	Connect to test point TP4 . Negative side to test point TP5 .	IFT 1 (FM 1 st)	Wave form is shown in Fig. 4
				IFT 3 (FM 2 nd)	Wave form is shown in Fig. 5
FM-RF ALIGNMENT					
Connect to test point TP1 through FM dummy antenna. Negative side to test point TP3 .	87.0 MHz	Tuning capacitor fully closed.	Phones Jack (32 Ω) <div>Fabricate the plug as shown in Fig.3 and then connect the lead wires of the plug to the measuring instrument.</div>	L4 (FM OSC Coil)	Adjust for maximum output.
“	109.0 MHz	Tuning capacitor fully open.	“	TC1-2 (FM OSC Trimmer)	“
“	90.0 MHz	Tune to signal	“	L3 (FM ANT Coil)	“
“	106.0 MHz	“	“	TC1-1 (FM ANT Trimmer)	1. Adjust for maximum output. 2. Repeat steps (2) ~ (5).
FM STEREO ALIGNMENT					
“	98.0 MHz	“	Connect to test point TP6 and TP8 . Negative side to test point TP7 . (Shown in Fig. 6)	VR1	1. Set the volume control to minimum. 2. Adjust VR1 for 38.0 kHz reading on frequency counter.

● AM ALIGNMENT

SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT (Shown in Fig.1)	REMARKS
CONNECTIONS	FREQUENCY				
AM-IF ALIGNMENT					
Fashion a loop of several turns of wire and radiate a signal into the loop ant. of receiver.	455 kHz	Point of non-interference. (on/about 600kHz)	Phones Jack (32 Ω) Fabricate the plug as shown in Fig.3 and then connect the lead wires of the plug to the measuring instrument.	IFT2 (AM IFT)	Adjust for maximum output.
AM-RF ALIGNMENT					
Fashion a loop of several turns of wire and radiate a signal into the loop ant. of receiver.	510 kHz	Tuning capacitor fully closed.	"	L6 (AM OSC Coil)	"
"	1730 kHz	Tuning capacitor fully open.	"	TC1-4 (AM OSC Trimmer)	"
"	600 kHz	Tune to signal	"	(*1) L5 (AM ANT Coil)	Adjust for maximum output. Adjust L5 by moving coil along the ferrite core.
"	1400 kHz	"	"	TC1-3 (AM ANT Trimmer)	Adjust for maximum output. Repeat steps (8) ~ (11).
(*1) Fix antenna coil with wax after completing alignment.					

< CASSETTE DECK SECTION >

• ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

- Set function selector/operation switch to TAPE/**OFF**.
- Set beat proof switch to "I".
- Set volume control to center position.

• HEAD AZIMUTH ALIGNMENT

TEST TAPE	INDICATOR ELECTRONIC VOLTMMETER or OSCILLOSCOPE	ADJUSTMENT	REMARKS
QZZCFM (8 kHz, -20 dB)	Headphones Jack (32Ω) Fabricate the plug shown in Fig.3 and then connect the lead wires of the plug to the measuring instrument.	Azimuth Screw (Shown in Fig. 7)	1. Insert the test tape (QZZCFM) and start playback. 2. Adjust the azimuth screw for maximum waveform on the oscilloscope and the similar output on L and R channels.

Caution:

- Please remove the screw-locking bond left on the head base when replacing the azimuth screw and spring.
- After the adjustment, apply screwlock to the azimuth adjusting screw and spring. (Screw-locking bond: RZZ0L01)

• RECORDING BIAS OSC ALIGNMENT

TEST TAPE	INDICATOR ELECTRONIC VOLTMMETER or OSCILLOSCOPE	ADJUSTMENT	REMARKS
Normal tape	Connect to test point TP10 . Negative side to test point TP11 .	L9 (Shown in Fig. 2.)	1. Insert the normal tape and set the recording mode. 2. Adjust L9 for 78 kHz \pm 200 Hz reading on frequency counter.

• ALIGNMENT POINT

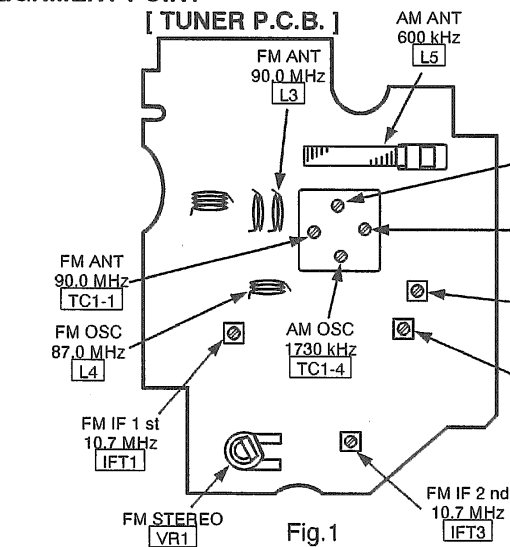


Fig.1

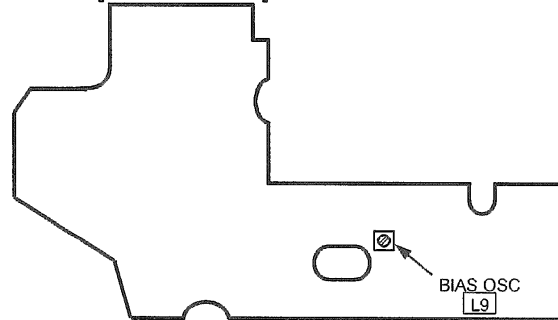
[MAIN P.C.B.]

Fig.2

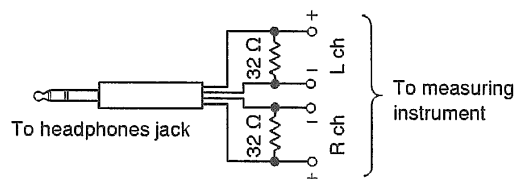


Fig.3

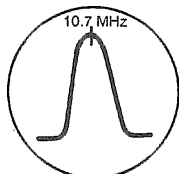


Fig.4



Fig.5

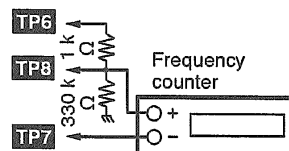


Fig.6

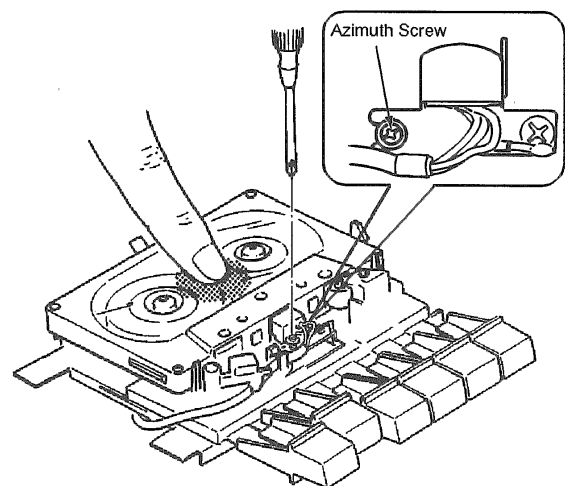


Fig.7

Schematic Diagram

	Page
A CD CIRCUIT	16, 17
B TUNER CIRCUIT	18, 19
C MAIN CIRCUIT	18, 19
D OPERATION CIRCUIT	19

- S1-1, S1-2 : Band switch. (BAND)
- S2-1 ~ S2-9 : REC/PLAY select switch.
(P...play, R...recording)
- S3-1 ~ 3-4 : Function selector/operation switch.
(SELECTOR)
- S4-1, 4-2 : FM mode/beat proof switch. (FM MODE/BP)
- S5 : Disc lid open/close detect switch.
- S6 : SPEAKER/HEADPHONE select switch.
(HP...HEADPHONE, SP...SPEAKER)
- S7 : AC/DC select switch in "AC" position.
- S8 : CD play/pause switch. (▶ / ||)
- S9 : CD stop switch. (■)
- S11 : CD skip/search switch. (◀◀)
- S12 : CD skip/search switch. (▶▶)
- S13 : Motor switch.
- VR1 : FM stereo adjustment VR
- VR301-1, VR301-2 : Tone control VR (TONE)
- VR302-1, VR302-2 : Volume control VR (VOLUME)

● Battery current:


Vol. min...	88.2 mA (FM)	Vol. max...	840 mA (FM)
	76.2 mA (AM)		790 mA (AM)
	130 mA (TAPE)		900 mA (TAPE)
	320 mA (CD)		1060 mA (CD)

Measurement instruction







FM	: 60 dB, 30% Mod.
AM	: 74 dB/m, 30% Mod.
TAPE	: 315 Hz, 0 dB
CD	: 1 kHz, 0 dB

- DC voltage measurements are taken with electronics voltmeter.
The negative terminal of the battery provides negative meter connection point.

No mark TAPE PLAYBACK (()) CD
() AM < > FM

- 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 any time with the development of new technology.

-  : CD Signal Line
-  : FM Signal Line
-  : Tape Playback Signal Line
-  : Record Signal Line
-  : Main Signal Line
-  : +B Line

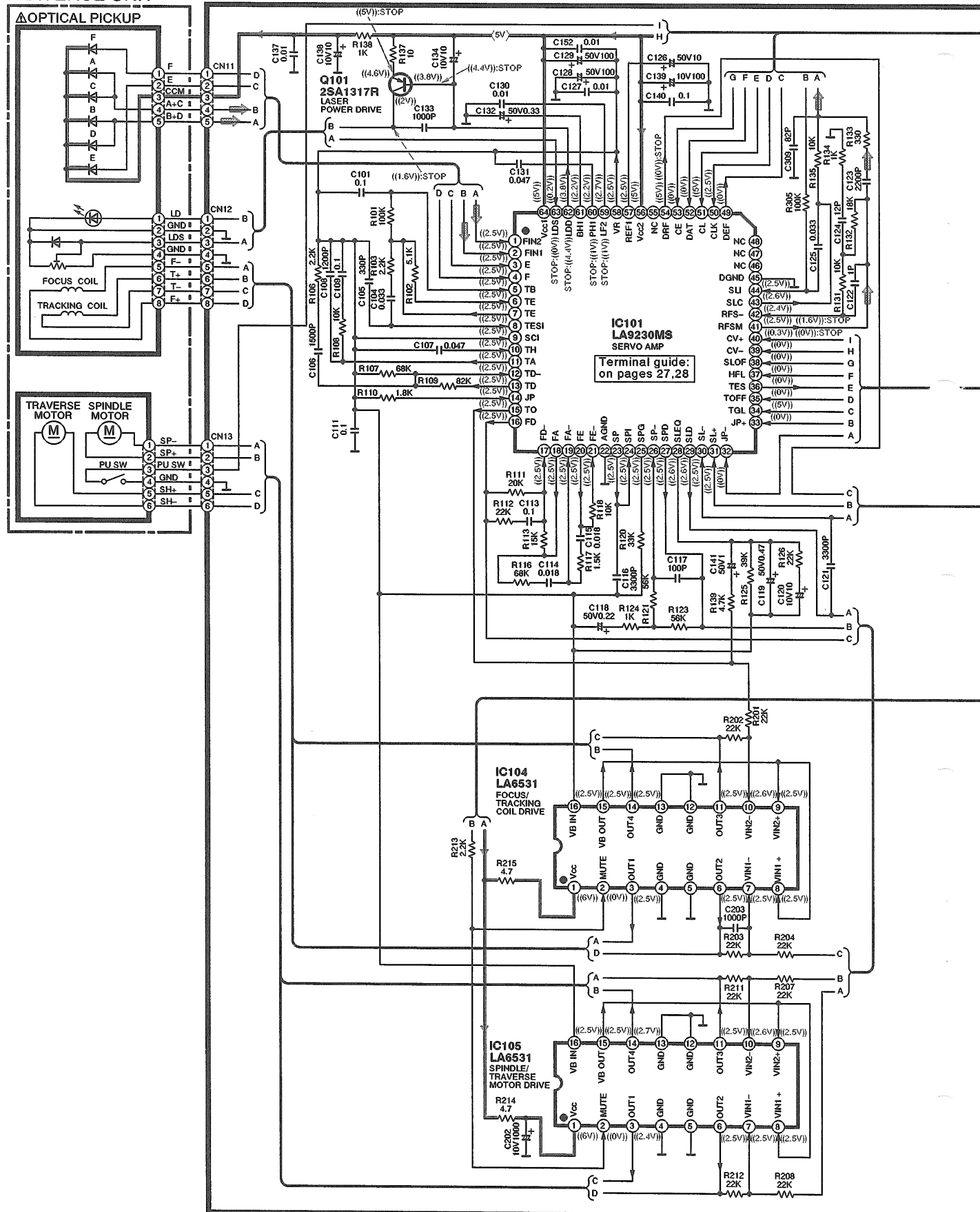
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE 2 A 250 V FUSE.



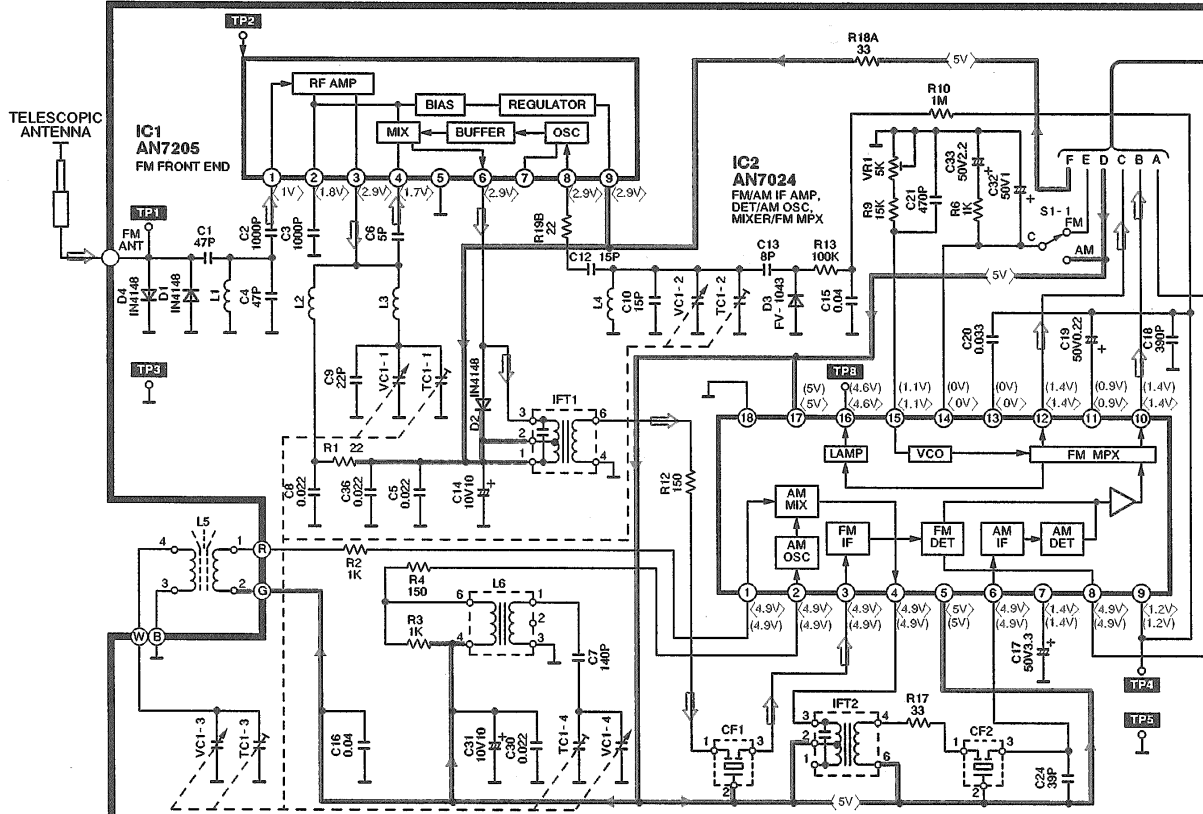
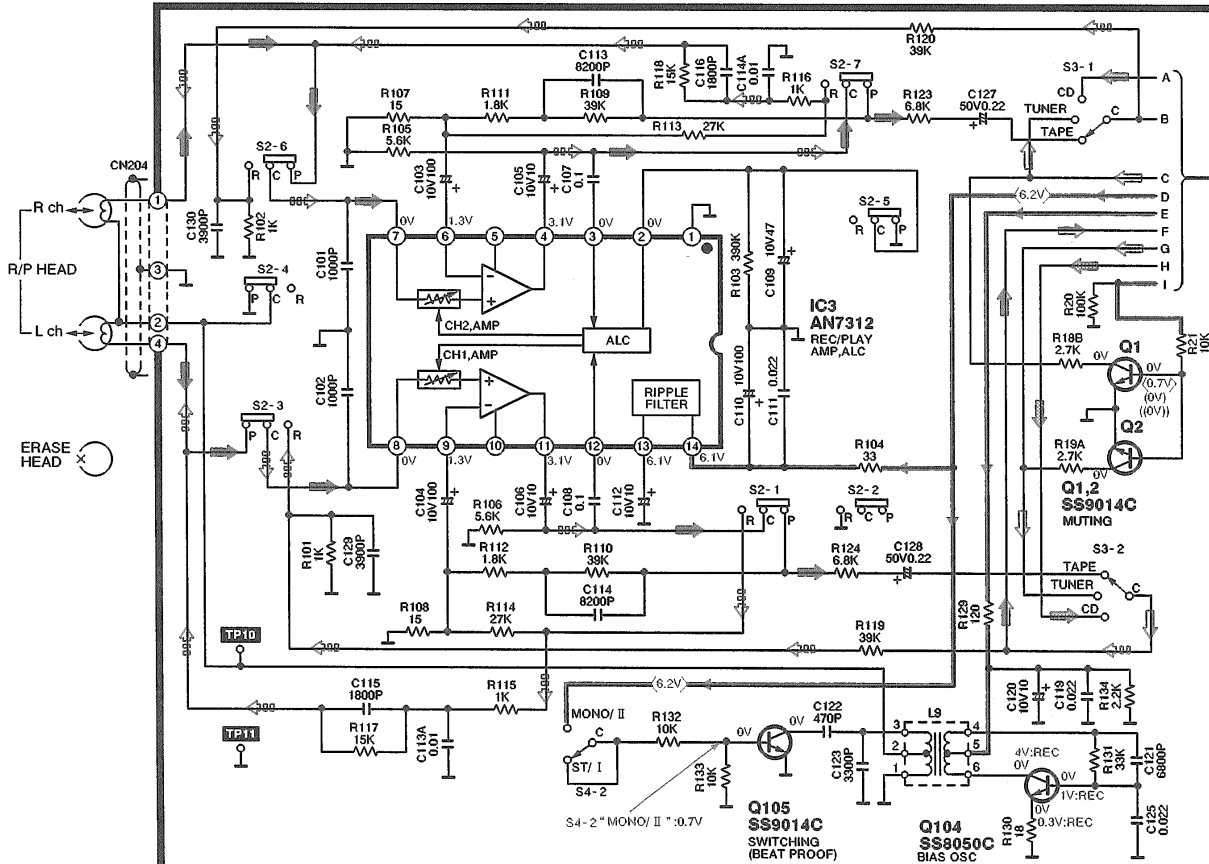
RISK OF FIRE-REPLACE FUSE AS MARKED.

TRAVERSE UNIT

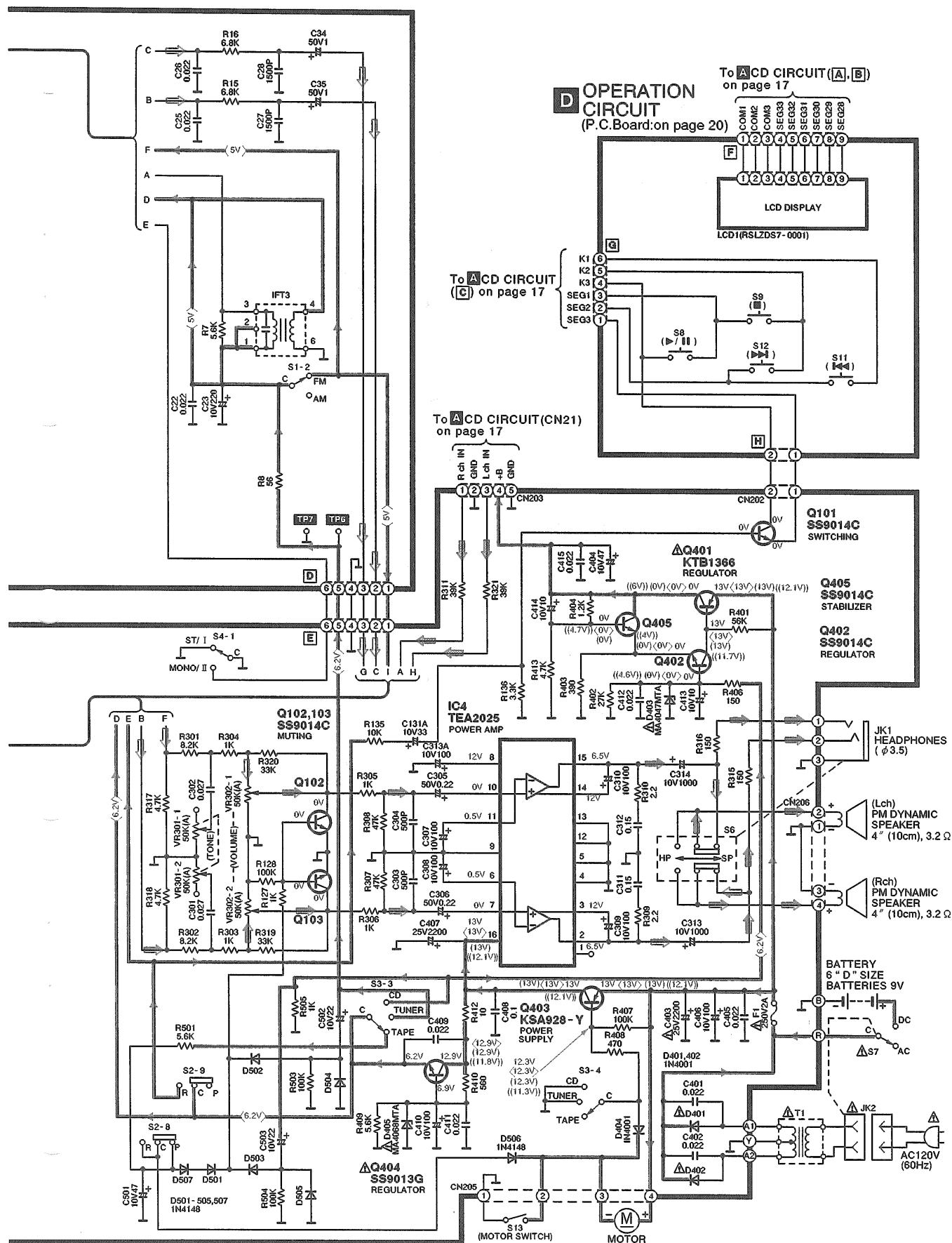
A CD CIRCUIT (P.C.Board: on page 20)





B TUNER CIRCUIT (P.C.Board: on page 21)**C MAIN CIRCUIT** (P.C.Board: on page 21)

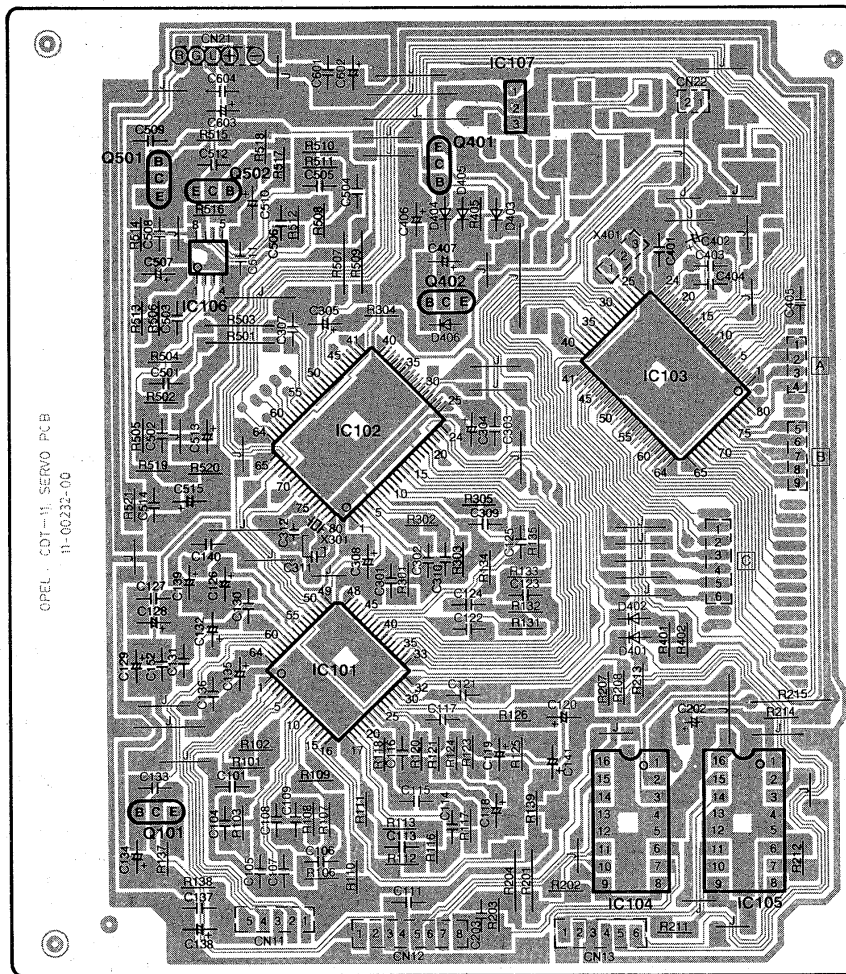
 : CD Signal Line
  : FM Signal Line
  : Tape Playback Signal Line
 : Record Signal Line
 : Main Signal Line
 : +B Line



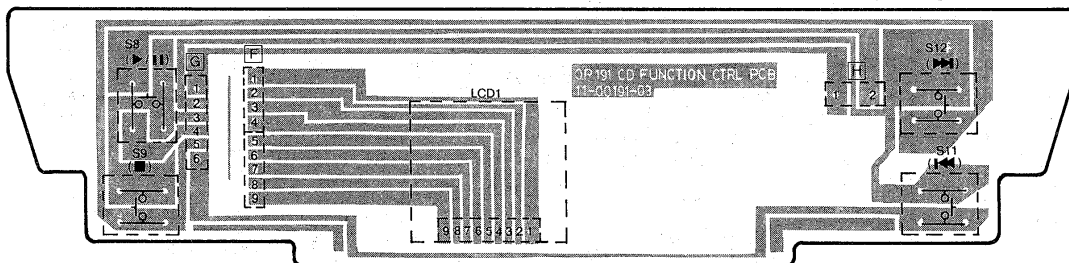
■ Printed Circuit Board Diagram

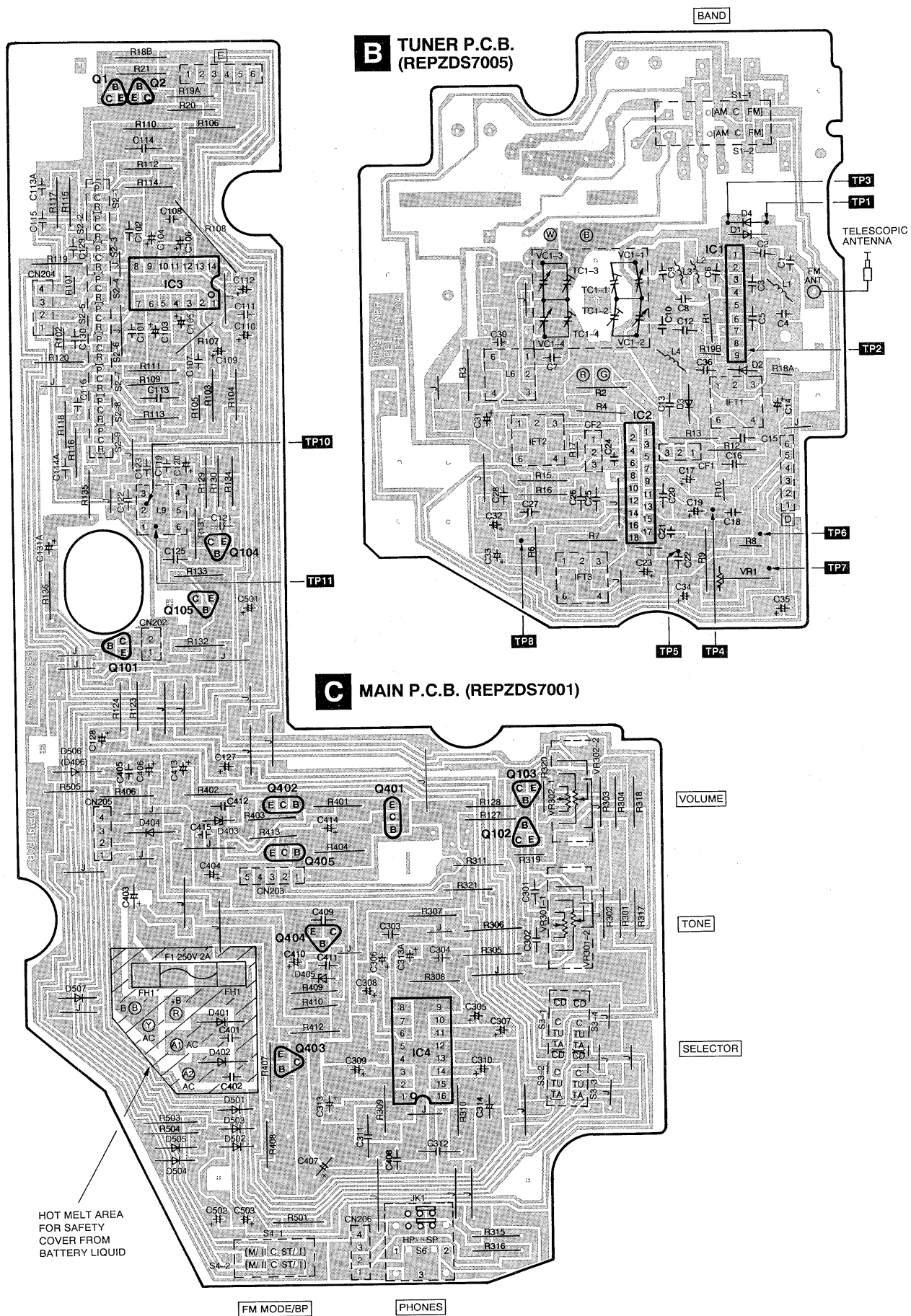
- This circuit board diagram may be modified at any time with the development of new technology.

A CD P.C.B. (REPZDS7003)

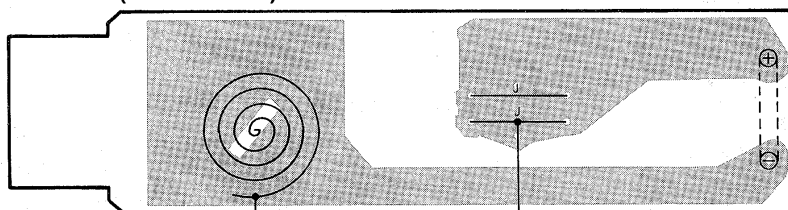


D OPERATION P.C.B. (REPZDS7004)





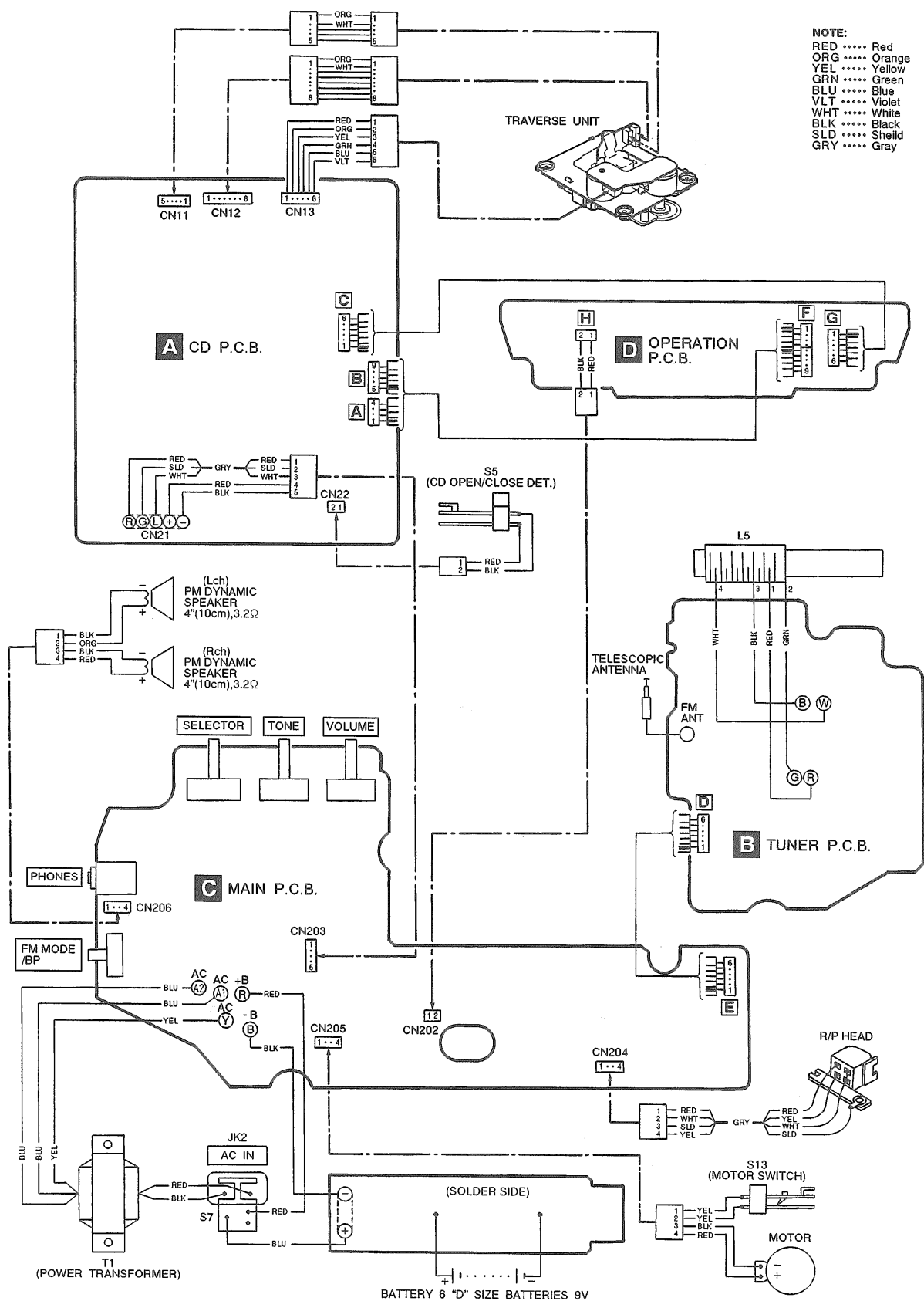
(REPZDS7002)



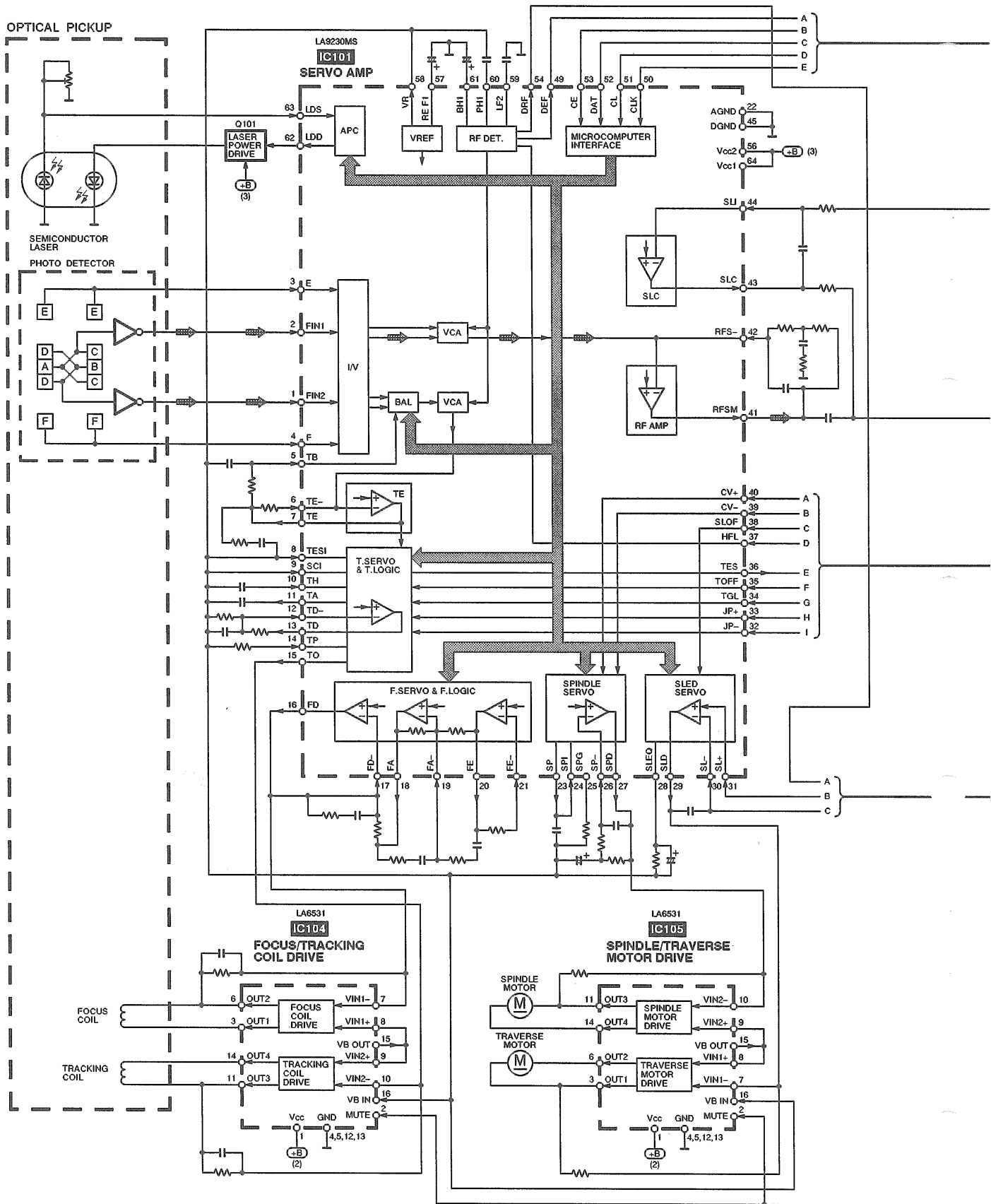
BATTERY 6 "D" SIZE BATTERIES 9V

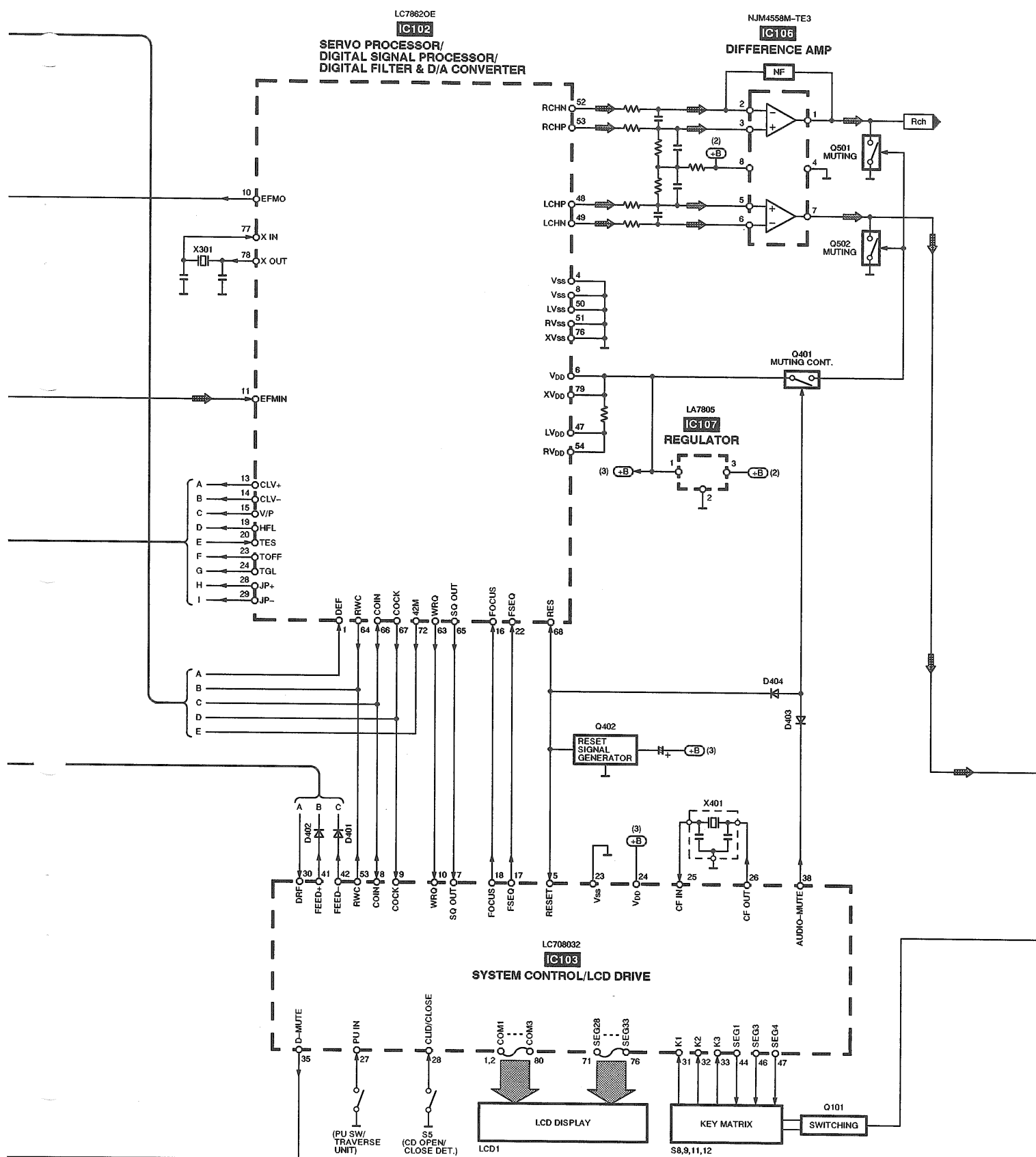
<p>NJM4558M-TE3</p>	<p>AN7312 14PIN TEA2025 18PIN</p>	<p>LA6531</p>	<p>LA9230MS</p>	<p>LC708032 LC78620E</p>	<p>AN7205</p>
<p>AN7024</p>	<p>LA7805</p>	<p>SS8050C SS9013G SS9014C</p>	<p>KSA928-Y</p>	<p>KTB1366</p>	
	<p>2SA1317R 2SA1346 2SC3400 2SD1936T</p>		<p>1N4001 1N4148 GMB01BT-M1</p>		<p>MA4047MTA MA4068MTA</p>
				<p>FV-1043</p>	

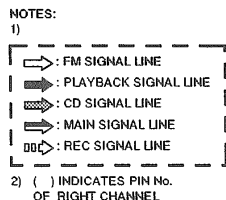
Wiring Connection Diagram



Block Diagram







■ Function of IC Terminals

● IC101 (LA9230MS)

Pin No.	Terminal Name	I/O	Function
1	FIN2	I	Pickup photodiode connection pin. Added to FIN1 pin to generate the RF signal subtracted from FIN1 pin to generate the FE signal.
2	FIN1	I	Pickup photodiode connection pin.
3	E	I	Pickup photodiode connection pin. Subtracted from F pin to generate the TE signal.
4	F	I	Pickup photodiode connection pin.
5	TB	I	TE signal DC component input pin.
6	TE-	I	Pin which connects the TE signal gain setting resistor between this pin and TE pin.
7	TE	O	TE signal output pin.
8	TESI	I	TES (Track Error Sense) comparator input pin. The TE signal is input through a band pass filter.
9	SCI	I	Shock detection input pin.
10	TH	I	Tracking gain time constant setting pin.
11	TA	O	TA amplifier output pin.
12	TD-	I	Pin for configuring the tracking phase compensation constant between the TD and VR pins.
13	TD	O	Tracking phase compensation setting pin.
14	JP	I	Tracking jump signal (kick pulse) amplitude setting pin.
15	TO	O	Tracking control signal output pin.
16	FD	O	Focusing control signal output pin.
17	FD-	I	Pin for configuring the focusing phase compensation constant between the FD and FA pins.
18	FA	O	Pin for configuring the focusing phase compensation constant between the FD- and FA- pins.
19	FA-	I	Pin for configuring the focusing phase compensation constant between the FA and FE pins.
20	FE	O	FE signal output pin.
21	FE-	I	Pin which connects the FE signal gain setting resistor between this pin and FE pin.
22	AGND	—	Analog signal GND.
23	SP	O	CV+ and CV- pins input signal single-end output.
24	SPI	I	Spindle amplifier input.

Pin No.	Terminal Name	I/O	Function
25	SPG	—	12-cm spindle mode gain setting connection pin.
26	SP-	I	Spindle phase compensation constant connection pin. Analog with the SPD pin.
27	SPD	O	Spindle control signal output pin.
28	SLEQ	—	Sled phase compensation constant connection pin.
29	SLD	O	Sled control signal output pin.
30	SL-	I	Input pin for sled movement signal from microprocessor.
31	SL+	I	Input pin for sled movement signal from microprocessor.
32	JP-	I	Input pin for tracking jump signal from DSP.
33	JP+	I	Input pin for tracking jump signal from DSP.
34	TGL	I	Input pin for tracking gain control signal from DSP. Gain is low when TGL is high.
35	TOFF	I	Input pin for tracking off control signal from DSP. Tracking servo is off when TOFF is high.
36	TES	O	Output pin for TES signal to DSP.
37	HFL	I	The High Frequency Level is used to determine whether the main beam is positioned over a bit or over the mirrored surface.
38	SLOF	I	Sled servo off control input pin.
39	CV-	I	Input pin for CLV error signal from DSP.
40	CV+	I	Input pin for CLV error signal from DSP.
41	RFSM	O	RF output pin.
42	RFS-	I	RF gain setting and EFM signal 3T compensation constant setting pin. Analog with the RFSM pin.
43	SLC	O	Slice Level Control is an output pin that controls the data slice level used by the DSP for the RF waveform.
44	SLI	I	Input pin used by DSP for controlling the data slice level.
45	DGND	—	Digital system GND pin.
46	NC	—	No connection
47	NC	—	No connection
48	NC	—	No connection

● IC101 Continued

Pin No.	Terminal Name	I/O	Function
49	DEF	O	Disc defect detection output pin.
50	CLK	I	Reference clock input pin. 4.23 MHz signal from the DSP is input.
51	CL	I	Microprocessor command clock input pin.
52	DAT	I	Microprocessor command data input pin.
53	CE	I	Microprocessor command chip enable input pin.
54	DRF	O	RF level detection output (Detect RF).
55	NC	—	No connection
56	VCC2	—	Servo system and digital system Vcc pin.
57	REF1	—	Bypass capacitor connection pin for reference voltage.
58	VR	O	Reference voltage output pin.
59	LF2	—	Disc defect detection time constant setting pin.
60	PH1	—	RF signal peak hold capacitor connection pin.
61	BH1	—	RF signal bottom hold capacitor connection pin.
62	LDD	O	APC circuit output pin.
63	LDS	I	APC circuit input pin.
64	VCC1	—	RF system Vcc pin.

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 components, be sure to use only manufacture'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.

*Remote Control Ass'y: Supply period for three years from termination of production.

* [M] Indicates in Remarks columns parts that are supplied by MESA.

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

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

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)		D404	1N4001	DIODE	
				D405	MA4068M	DIODE	Δ
				D501-507	1N4148	DIODE	
IC1	AN7205	IC				DIODE (S)	
IC2	AN7024	IC				FOR CD (SERVO) CIRCUIT	
IC3	AN7312	IC					
IC4	TEA2025	IC		D401-406	GMB01BT-M1	DIODE	
		INTEGRATED CIRCUIT (S)				VARIABLE RESISTOR(S)	
		FOR CD(SERVO) CIRCUIT					
IC101	LA9230MS	IC		VR1	RRNZDS7001	VR	
IC102	LC78620E	IC		VR301	RRVZDS7001	VR	
IC103	LC708032	IC		VR302	RRVZDS7002	VR	
IC104, 105	LA6531	IC				VARIABLE CAPACITOR(S)	
IC106	NJM4558M-TE3	IC					
IC107	LA7805	IC	Δ	VC1	RCVZDS7001	VARIABLE CAPACITOR	
		TRANSISTOR(S)				TRANSFORMER(S)	
Q1, 2	SS9014C	TRANSISTOR		T1	RTPZDS7-0001	POWER TRANSFORMER	Δ
Q101	SS9014C	TRANSISTOR		IFT1	RLIZDS8-002	IFT	
Q102	SS9014C	TRANSISTOR		IFT2	RLIZDS8-003	IFT	
Q103	SS9014C	TRANSISTOR		IFT3	RLIZDS8-001	IFT	
Q104	SS8050C	TRANSISTOR				COIL(S)	
Q105	SS9014C	TRANSISTOR					
Q401	KTB1366	TRANSISTOR	Δ	L1	RL0ZDS7003	COIL	
Q402	SS9014C	TRANSISTOR		L2, 3	RL0ZDS7010	COIL	
Q403	KSA928-Y	TRANSISTOR		L4	RL0ZDS7002	COIL	
Q404	SS9013G	TRANSISTOR	Δ	L5	RLVZDS7002	COIL	
Q405	SS9014C	TRANSISTOR		L6	RLIZDS7001	COIL	
		TRANSISTOR(S)		L9	RL0ZDS7001	COIL	
		FOR CD(SERVO) CIRCUIT				FILTER(S)	
Q101	2SA1317R	TRANSISTOR		CF1	RLFZDS7001	CERAMIC FILTER	
Q401	2SA1346	TRANSISTOR		CF2	RLFZDS8-001	CERAMIC FILTER	
Q402	2SC3400	TRANSISTOR				OSCILLATOR(S)	
Q501, 502	2SD1936T	TRANSISTOR				FOR CD(SERVO) CIRCUIT	
		DIODE(S)					
				X301	RSXZDS7001	OSCILLATOR	
D1, 2, 4	1N4148	DIODE		X401	RSXZDS7002	OSCILLATOR	
D3	FV-1043	DIODE					
D401, 402	1N4001	DIODE	Δ				
D403	MA4047MTA	DIODE	Δ				

Ref. No.	Part No.	Part Name & Description	Remarks				
		DISPLAY (S)					
LCD1	RSLZDS7-0001	LCD					
		FUSE (S)					
F1	RSFZDS7001	FUSE	△				
		SWITCH(ES)					
S1	RSSZDS7010	SW					
S2	RSPZDS7001	SW					
S3	RSSZDS7002	SW					
S4	RSSZDS7001	SW					
S6	RJJZDS8-0002	SW					
S7	RJJZDS7-0001	SW (JK2)	△				
S8, 9	RSGZDS7001	SW					
S11, 12	RSGZDS7001	SW					
S13	RSHZDS7-0002	SW					
S101	RSHZDS7-0001	SW					
		SWITCH					
		FOR CD(SERVO) CIRCUIT					
S5	RSHZDS7-0001	SW					
		CONNECTOR (S)					
CN202	RJTZDS7001	CONNECTOR (2P)					
CN203	RJTZDS7003	CONNECTOR (5P)					
CN204, 205	RJTZDS7002	CONNECTOR (4P)					
CN206	RJTZDS7002	CONNECTOR (4P)					
		CONNECTOR (S)					
		FOR CD(SERVO) CIRCUIT					
CN11	RJTZDS8-0002	CONNECTOR (5P)					
CN12	RJTZDS8-0004	CONNECTOR (8P)					
CN13	RJTZDS7011	CONNECTOR (6P)					
CN22	RJTZDS8-0001	CONNECTOR (2P)					
		JACK (S)					
JK1	RJJZDS8-0002	JACK, HEADPHONES (S6)					
JK2	RJJZDS7-0001	JACK, AC IN (S7)	△				
		FUSE HOLDER (S)					
FH1	RJFZDS7001	FUSE HOLDER					

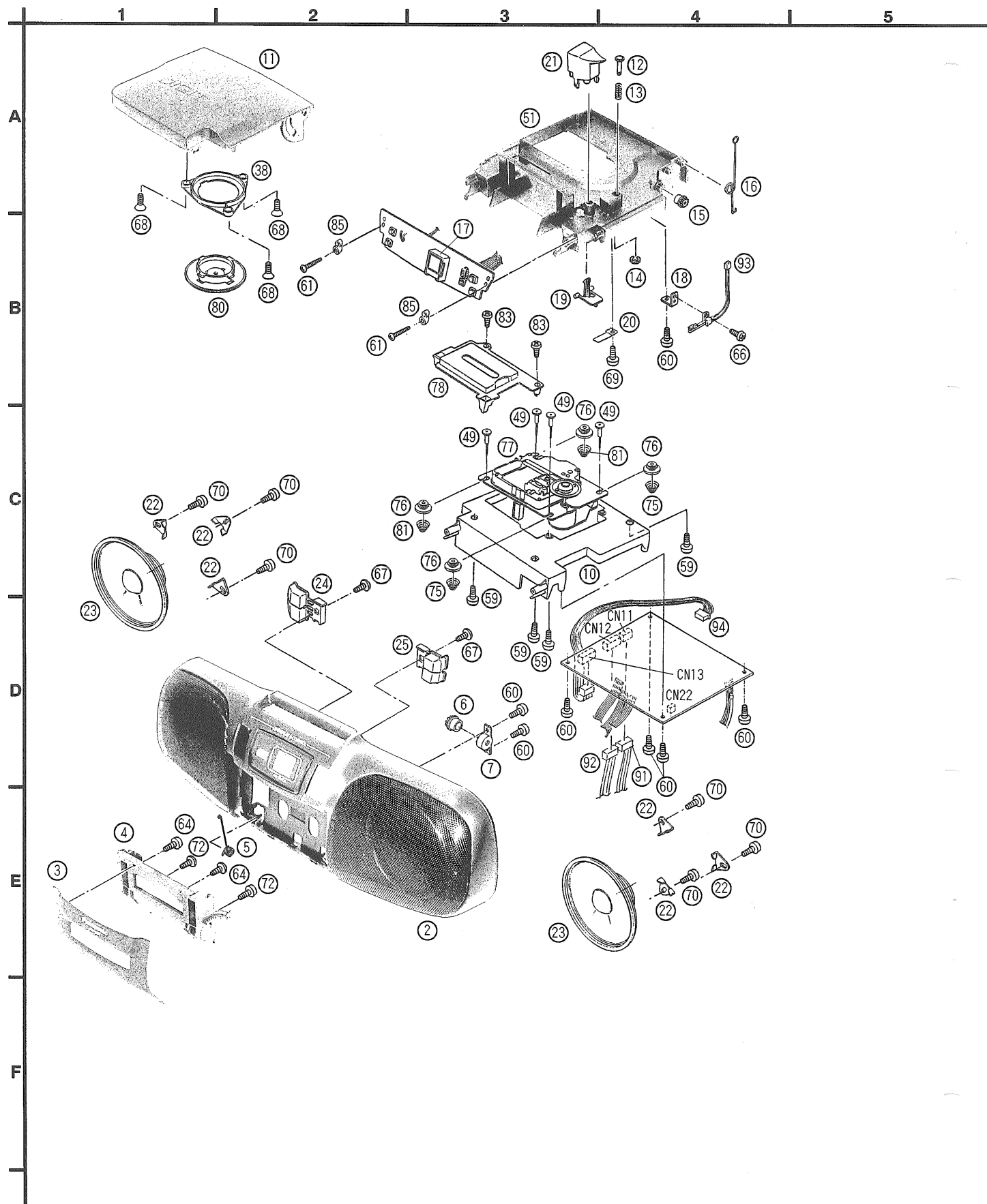
Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
 * Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM) , 1M=1,000k (OHM)

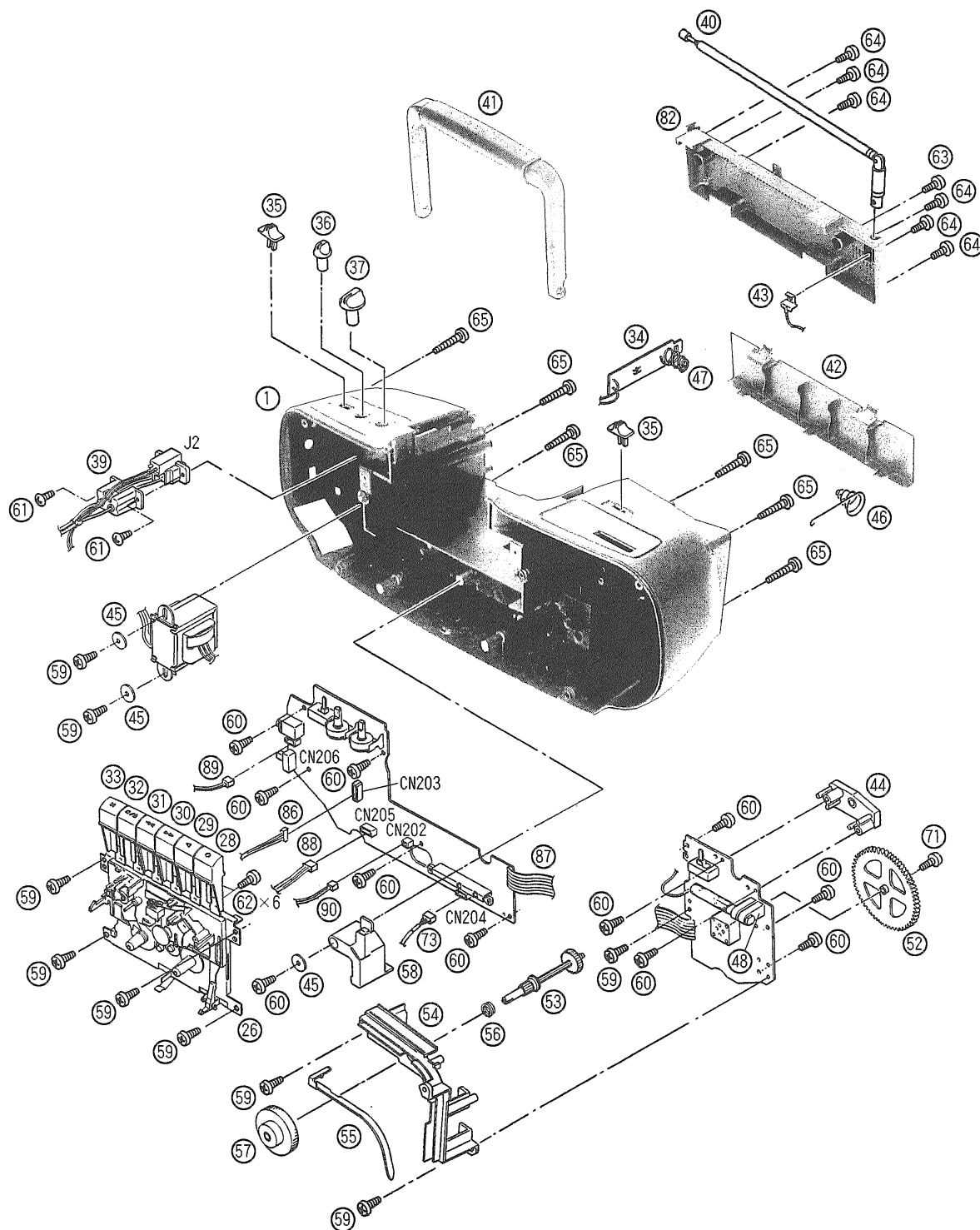
Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
		RESISTOR(S)	R317, 318	ERD25FJ472	1/4W 4.7K	C34, 35	ECEA1HJ010	50V 1U
			R319, 320	ERD25TJ333	1/4W 33K	C36	ECFR1C223MR	16V 0.022U
			R321	ERD25TJ393	1/4W 39K	C101, 102	ECQP2A102JZT	100V 1000P
R1	ERDS2TJ220T	1/4W 22	R401	ERD25TJ563T	1/4W 56K	C103, 104	ECEA1AU101	10V 100U
R2, 3	ERDS2TJ102	1/4W 1K	R402	ERD25TJ273T	1/4W 27K	C105, 106	ECEA1AU100	10V 10U
R4	ERDS2TJ151	1/4W 150	R403	ERD25FJ391	1/4W 390	C107, 108	ECQE2104KF3	200V 0.1U
R6	ERDS2TJ102	1/4W 1K	R404	ERD25FJ122	1/4W 1.2K	C109	ECEA1AU470	10V 47U
R7	ERDS2TJ562	1/4W 5.6K	R406	ERD25TJ151T	1/4W 150	C110	ECEA1AU101	10V 100U
R8	ERDS2TJ560T	1/4W 56	R407	ERD25TJ104	1/4W 100K	C111	ECFR1C223MR	16V 0.022U
R9	ERDS2TJ153	1/4W 15K	R408	ERD25TJ471	1/4W 470	C112	ECEA1AU100	10V 10U
R10	ERDS2TJ105T	1/4W 1M	R409	ERD25TJ562T	1/4W 5.6K	C113, 114	ECQB1H822JF3	50V 8200P
R12	ERDS2TJ151	1/4W 150	R410	ERD25FJ561	1/4W 560	C113A, 114A	ECQB1H103KF3	50V 0.01U
R13	ERDS2TJ104	1/4W 100K	R412	RRSZDS7001	1/4W 10	C115, 116	ECQP2A182JZT	100V 1800P
R15, 16	ERDS2TJ682T	1/4W 6.8K	R413	ERD25FJ472	1/4W 4.7K	C119	ECFR1C223MR	16V 0.022U
R17, 18A	ERDS2TJ330	1/4W 33	R501	ERD25TJ562T	1/4W 5.6K	C120	ECEA1AU100	10V 10U
R18B, 19A	ERD25FJ272	1/4W 2.7K	R503	ERD25TJ104	1/4W 100K	C121	ECQB1H682JF3	50V 6800P
R19B	ERDS2TJ220T	1/4W 22	R504	ERD25TJ104	1/4W 100K	C122	ECXD1H471KB	50V 470P
R20	ERD25TJ104	1/4W 100K	R505	ERD25TJ102	1/4W 1K	C123	ECQP1332JZ	100V 330CP
R21	ERD25FJ103	1/4W 10K				C125	ECQP2A223JZ	100V 0.022U
R101, 102	ERDS2TJ102	1/4W 1K			CAPACITOR(S)	C127, 128	ECEA1HUR22	50V 0.22U
R103	ERD25TJ394	1/4W 390K				C129, 130	ECQP1392JZ	100V 3900P
R104	ERD25TJ330T	1/4W 33	C1	ECCRH1470K5	50V 47P	C131A	ECEA1AU330	10V 33U
R105, 106	ERD25TJ562T	1/4W 5.6K	C2, 3	ECKRH102MD5	50V 1000P	C301, 302	ECQB1H273KF3	50V 0.027U
R107, 108	ERD25TJ150T	1/4W 15	C4	ECCRH1470K5	50V 47P	C303, 304	RCKZDS7002	500P
R109, 110	ERD25TJ393	1/4W 39K	C5	ECFR1C223MR	16V 0.022U	C305, 306	ECEA1HUR22	50V 0.22U
R111, 112	ERD25FJ182	1/4W 1.8K	C6	ECCD1H050CC	50V 5P	C307-310	ECEA1AU101	10V 100U
R113, 114	ERD25TJ273T	1/4W 27K	C7	RCKZDS7003	140P	C311, 312	ECQV1H154JZ3	50V 0.15U
R115, 116	ERD25TJ102	1/4W 1K	C8	ECFR1C223MR	16V 0.022U	C313, 314	ECEA1AU102B	10V 1000U
R117, 118	ERD25TJ153	1/4W 15K	C9	ECCRH220JC5	50V 22P	C313A	ECEA1AU101	10V 100U
R119, 120	ERD25TJ393	1/4W 39K	C10	ECCRH150JC5	50V 15P	C401, 402	ECFR1C223MR	16V 0.022U
R123, 124	ERD25FJ682	1/4W 6.8K	C12	ECCRH150KC5	50V 15P	C403△	ECEA1EU222B	25V 2200U
R127	ERD25TJ102	1/4W 1K	C13	ECCRH080CC5	50V 8P	C404	ECEA1AU470	10V 47U
R128	ERD25TJ104	1/4W 100K	C14	ECEA1AU100	10V 10U	C405	ECFR1C223MR	16V 0.022U
R129	ERD25TJ121	1/4W 120	C15	RCKZDS7004	0.04U	C406	ECEA1AU101	10V 100U
R130	ERD25FJ180	1/4W 18	C16	RCKZDS7004	0.04U	C407	ECEA1EU222B	25V 2200U
R131	ERD25TJ333	1/4W 33K	C17	ECEA1HK3R3	50V 3.3U	C408	ECFR1E104KR	25V 0.1U
R132	ERD25FJ103	1/4W 10K	C18	ECKRH391KB5	50V 390P	C409	ECFR1C223MR	36V 0.022U
R133	ERD25FJ103	1/4W 10K	C19	ECEA1HUR22	50V 0.22U	C410	ECEA1AU101	10V 100U
R134	ERD25FJ222	1/4W 2.2K	C20	ECQM1H333JZ	50V 0.033U	C411, 412	ECFR1C223MR	16V 0.022U
R135	ERD25FJ103	1/4W 10K	C21	ECXD1H471KB	50V 470P	C413, 414	ECEA1AU100	10V 10U
R136	ERD25FJ332	1/4W 3.3K	C22	ECFR1C223MR	16V 0.022U	C415	ECFR1C223MR	16V 0.022U
R301, 302	ERD25FJ822	1/4W 8.2K	C23	ECEA1AU221	10V 220U	C501	ECEA1AU470	10V 47U
R303	ERD25TJ102	1/4W 1K	C24	ECCD1H390KC	50V 39P	C502, 503	ECEA1AU220B	10V 22U
R304, 305	ERD25TJ102	1/4W 1K	C25, 26	ECQV1H223JZ3	50V 0.022U			
R306	ERD25TJ102	1/4W 1K	C27, 28 [M]	ECQP1152JZT	100V 1500P			RESISTOR(S)
R307, 308	ERD25TJ473	1/4W 47K	C30	ECFR1C223MR	16V 0.022U			FOR CD(SERVO)CIRCUIT
R309, 310	ERD25TJ2R2	1/4W 2.2	C31	ECEA1AU100	10V 10U			
R311	ERD25TJ393	1/4W 39K	C32	ECEA1HJ010	50V 1U	R101	ERDS2TJ104	1/4W 100K
R315, 316	ERD25TJ151T	1/4W 150	C33	ECEA1HV2R2	50V 2.2U	R102	BREZDS7003	1/16W 5.1K

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
R103	ERDS2TJ222	1/4W 2.2K	R511	ERDS2TJ223	1/4W 22K	C302	ECFR1E104KR	25V 0.1U
R106	ERDS2TJ222	1/4W 2.2K	R512	ERDS2TJ153	1/4W 15K	C303	ECFR1E104KR	25V 0.1U
R107	ERD25TJ683T	1/4W 68K	R513	ERDS2TJ102	1/4W 1K	C304	ECEA1AU101	10V 100U
R108	ERDS2TJ103	1/4W 10K	R514	ERDS2TJ221	1/4W 220	C305	ECEA1AU221	10V 220U
R109	ERD25TJ823	1/4W 82K	R515	ERDS2TJ222	1/4W 2.2K	C307	ECKD1H103ZF	50V 0.01U
R110	ERDS2TJ182	1/4W 1.8K	R516	ERDS2TJ102	1/4W 1K	C308	ECEA1AU101	10V 100U
R111	ERDS2TJ203T	1/4W 20K	R517	ERDS2TJ221	1/4W 220	C309	ECCRIH820WC5	50V 82P
R112	ERDS2TJ223	1/4W 22K	R518	ERDS2TJ222	1/4W 2.2K	C310	ECFR1E104KR	25V 0.1U
R113	ERDS2TJ153	1/4W 15K	R519	ERDS2TJ332	1/4W 3.3K	C311, 312	ECCRIH220JC5	50V 22P
R116	ERD25TJ683T	1/4W 68K	R520	ERD25FJ472	1/4W 4.7K	C401	ECFR1C223MR	16V 0.022U
R117	ERDS2TJ152	1/4W 1.5K	R521	ERD25TJ470	1/4W 47	C402	ECEA1AU101	10V 100U
R118	ERDS2TJ103	1/4W 10K				C403, 404	ECFR1E104KR	25V 0.1U
R120	ERDS2TJ333	1/4W 33K			CAPACITOR(S)	C405	ECFR1E104KR	25V 0.1U
R121	ERD25TJ563T	1/4W 56K			FOR CD (SERVO) CIRCUIT	C406	ECEA1HU0R1	50V 0.1U
R123	ERD25TJ563T	1/4W 56K				C407	ECEA1HU4R7	50V 4.7U
R124	ERDS2TJ102	1/4W 1K	C101	ECQV1H104JM3	50V 0.1U	C501	ECCF1H221K	50V 220P
R125	ERDS2TJ393	1/4W 39K	C104	ECQB1H333JF3	50V 0.033U	C502, 503	ECCD1H181KB	50V 180P
R126	ERDS2TJ223	1/4W 22K	C105	ECCRIH331K5	50V 330P	C504	ECCF1H221K	50V 220P
R131	ERDS2TJ103	1/4W 10K	C106	ECQB1H152JF3	50V 1500P	C505, 506	ECCD1H181KB	50V 180P
R132	ERDS2TJ183T	1/4W 18K	C107	ECQB1H473JF3	50V 0.047U	C507	ECEA1HU4R7	50V 4.7U
R133	ERDS2TJ331	1/4W 330	C108	ECQB1H122JF3	50V 1200P	C508, 509	ECKR1H102MD5	50V 1000P
R134	ERDS2TJ102	1/4W 1K	C109	ECQV1H104JM3	50V 0.1U	C510	ECEA1AK100B	10V 10U
R135	ERDS2TJ103	1/4W 10K	C111	ECFR1E104KR	25V 0.1U	C511, 512	ECKR1H102MD5	50V 1000P
R137	ERDS2TJ100	1/4W 10	C113	ECQV1H104JM3	50V 0.1U	C513	ECEA1AU221	10V 220U
R138	ERDS2TJ102	1/4W 1K	C114, 115	RCKZDS7001	0.018U	C514	ECFR1E104KR	25V 0.1U
R139	ERD25FJ472	1/4W 4.7K	C116 [M]	ECFR1C332KR	16V 3300P	C515	ECEA1AU221	10V 220U
R201	ERD25FJ223	1/4W 22K	C117	ECCRIH101K	50V 100P	C601	ECFR1E104KR	25V 0.1U
R202, 203	ERDS2TJ223	1/4W 22K	C118	ECEA1HKAR22	50V 0.22U	C602	ECEA1AU331	10V 330U
R204	ERD25FJ223	1/4W 22K	C119	ECEA1HUR47B	50V 0.47U	C603	ECEA1HU471	50V 470U
R207, 208	ERDS2TJ223	1/4W 22K	C120	ECEA1AK100B	10V 10U	C604	ECFR1E104KR	25V 0.1U
R211, 212	ERDS2TJ223	1/4W 22K	C121 [M]	ECFR1C332KR	16V 3300P			
R213	ERDS2TJ222	1/4W 2.2K	C122	ECCRIH010DC5	50V 1P			
R214	ERDS2TJ4R7	1/4W 4.7	C123	ECQP1222JZ	100V 2200P			
R215	ERDS2TJ4R7	1/4W 4.7	C124	ECCD1H120KC	50V 12P			
R301	ERD25TJ681	1/4W 680	C125	ECQB1H333JF3	50V 0.033U			
R302	ERDS2TJ273	1/4W 27K	C126	ECEA1HU100B	50V 10U			
R303	RREZDS7003	1/16W 5.1K	C127	ECKD1H103ZF	50V 0.01U			
R304	ERDS2TJ331	1/4W 330	C128, 129	ECEA1HU101	50V 100U			
R305	ERDS2TJ104	1/4W 100K	C130	ECKD1H103ZF	50V 0.01U			
R401	ERDS2TJ104	1/4W 100K	C133	ECKR1H102MD5	50V 1000P			
R402	RREZDS7002	1/16W 91K	C134	ECEA1AK100B	10V 10U			
R405	ERDS2TJ223	1/4W 22K	C135	ECEA1AU221	10V 220U			
R501	RREZDS7001	1/16W 9.1K	C136	ECFR1E104KR	25V 0.1U			
R502	ERD25FJ822	1/4W 8.2K	C137	ECKD1H103ZF	50V 0.01U			
R503	RREZDS7001	1/16W 9.1K	C138	ECEA1AU100	10V 10U			
R504	ERD25FJ822	1/4W 8.2K	C139	ECEA1AU101	10V 100U			
R505	ERDS2TJ223	1/4W 22K	C140	ECFR1E104KR	25V 0.1U			
R506	ERDS2TJ153	1/4W 15K	C141	ECEA1HU010	50V 1U			
R507	RREZDS7001	1/4W 9.1K	C152	ECKD1H103ZF	50V 0.01U			
R508	ERD25FJ822	1/4W 8.2K	C202	ECEA1AU102B	10V 1000U			
R509	RREZDS7001	1/4W 9.1K	C203	ECKR1H102MD5	50V 1000P			
R510	ERD25FJ822	1/4W 8.2K	C301	ECQB1H473JF3	50V 0.047U			

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PART(S)		55	RGJZDS7-0001	DIAL POINTER	
1	RFKXDS7PKB	REAR CABINET ASS'Y		56	RMBZDS7-0006	SPRING	
2	RFKXDS7PKA	FRONT CABINET ASS'Y		57	RGXZDS7-0001	KNOB, TUNING	
3	RFKLXDS7PK	CASSETTE PANEL ASS'Y		58	RMLZDS7-0001	LEVER	
4	RKFZDS7-0003	CASSETTE HOLDER		59	XTV3+12G	SCREW	
5	RMBZDS7-0001	SPRING		60	XTV3+10G	SCREW	
6	RDGZDS7-0001	GEAR		61	XTB26+12C	SCREW	
7	RMFZDS7-0001	HOLDER		62	XTN2+4F	SCREW	
10	RMKZDS7-0001	CHASSIS		63	XTN3+10F	SCREW	
11	RKFZDS7-0001	TOP COVER		64	XTB3+12JFZ	SCREW	
12	RMMZDS7-0001	SHAFT		65	XTV3+20G	SCREW	
13	RMBZDS7-0003	SPRING		66	XTN26+4F	SCREW	
14	XUC3	E-RING		67	XTB26+8J	SCREW	
15	RDGZDS7-0002	GEAR		68	XTS26+8J	SCREW	
16	RMBZDS7-0004	SPRING		69	XTV3+6G	SCREW	
17	RMFZDS7-0005	LCD HOLDER		70	XTV3+8G	SCREW	
18	RMAZDS7-0001	HOLDER		71	XTN26+4FS	SCREW	
19	RMLZDS7-0002	LATCH		72	XTB26+8JFZ	SCREW	
20	RMCDZDS7-0001	SPRING		73	RBRZDS7-0001	WIRE ASS'Y (J11/4P)	
21	RGUZDS7-0009	BUTTON, CD EJECT		75	RMBZDS7-0002	SPRING1	
22	RMAZDS8-0001	FIXER		76	RMGZDS7-0001	RUBBER	
23	RASZDS7001	SPEAKER		77	RAEZDS7001	TRAVERSE DECK UNIT	
24	RGUZDS7-0007	BUTTON, SKIP/SEARCH		78	RMQZDS7-0001	COVER HOLDER	
25	RGUZDS7-0008	BUTTON, PLAY/PAUSE		80	RFKXDS7PKA	DISC HOLDER ASS'Y	
26	RAAZDS7001	CASSETTE MECHANISM UNIT		81	RMBZDS7-0005	SPRING2	
28	RGUZDS7-0001	BUTTON, RECORD		82	RFKXDS7PK	BACK PLATE	
29	RGUZDS7-0002	BUTTON, PLAY		83	XTN2+6F	SCREW	
30	RGUZDS7-0003	BUTTON, REW		85	RMQZDS7-0002	LCD PCB SPACER	
31	RGUZDS7-0004	BUTTON, FF		86	RJTZDS7012	WIRE ASS'Y (J4/5P)	
32	RGUZDS7-0005	BUTTON, STOP/EJECT		87	RFKEXDS7PKA	WIRE ASS'Y (J10/6P)	
33	RGUZDS7-0006	BUTTON, PAUSE		88	RSHZDS7-0002	WIRE ASS'Y (J12/4P)	
34	RJBZDS7002	BATTERY P. C. B		89	RJTZDS7004	WIRE ASS'Y (J16/4P)	
35	RGVZDS7-0001	KNOB, BAND FUNCTION		90	RFKEXDS7PKB	WIRE ASS'Y (J17/2P)	
36	RGWZDS7-0001	KNOB, TONE		91	RJTZDS7013	WIRE ASS'Y (J1/5P)	
37	RGWZDS7-0002	KNOB, VOLUME		92	RJTZDS7014	WIRE ASS'Y (J2/8P)	
38	RMFZDS7-0003	HOLDER		93	RJTZDS7010	WIRE ASS'Y (J5/2P)	
39	RMQZDS8-0009	AC SOCKET COVER		94	RJTZDS7011	WIRE ASS'Y (J3/6P)	
40	RSQZDS7-0001	TELESCOPIC ANTENNA				PACKING MATERIALS	
41	RKHZDS7-0001	HANDLE					
42	RKKZDS7-0001	BATTERY COVER		P1	RPG3221	GIFT BOX	
43	RJRZDS8-0001	TERMINAL		P2	RPQ0673	SPACER 1	
44	RMFZDS7-0004	SHAFT HOLDER		P3	RPQ0674	SPACER 2	
45	XWT3	WASHER		P4	RPN1017A	PAD A	
46	RMBZDS8-0009	BATTERY TERMINAL		P5	RPN1017B	PAD B	
47	RMBZDS7-0008	BATTERY TERMINAL-		P6	RPN1017C	PAD C	
48	RLVZDS7003	HOLDER		P7	RPN1017D	PAD D	
49	RHDZDS7-0001	SCREW				ACCESSORIES	
51	RKQZDS7-0001	TRAY					
52	RDDZDS7-0001	DIAL DRUM		A1	RQT3493-P	INSTRUCTION MANUAL	
53	RDGZDS7-0003	SHAFT		A2	RJAZDS7-0001	AC POWER CORD	△
54	RMKZDS7-0001	DIAL BRACKET					

Cabinet Parts Location





■ Packaging

