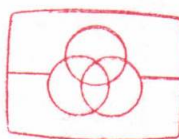


Service Manual

Portable Stereo Component System



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RX-DS660

COMPACT
disc
DIGITAL AUDIO

DIGITAL



www.freeservicemanuals.info

Color

(K)... Black Type

Area

Country Code	Area	Color
(E)	Continental Europe.	(K)
(EB)	Great Britain.	
(EG)	F.R. Germany & Italy.	

RX-FD55 MECHANISM SERIES (AR300)

SPECIFICATIONS

General:

Power Requirement: AC; 220V 50Hz...(E, EG)
240V, 50Hz...(EB)
Battery; 15V (10 UM-1, R20/LR20 batteries)
Memory Back-up Battery for Computer; 6V (4 UM-3, R6/LR6 batteries)
DC IN; 13.2V (⊖ — ⊕)

Power Consumption: 45W (AC only)

Power Output: 30W × 2...PMPO.
15W × 2...MPO....(E)

Speakers: 2-Woofers; 16cm (2.7Ω)
2-Tweeters; 2cm

Input: AUX; 200mV/47kΩ
Mix. Mic; 5mV/600Ω (φ3.5)
FM ANT; 75Ω

Output: Speaker; 2.7~8Ω
Headphones; 32Ω (φ3.5)

Dimensions (W × H × D): 702 × 229 × 218mm
Main unit; 349 × 229 × 218mm
Speaker box; 185 × 218 × 183mm
7.1kg without batteries

Weight:

CD Player Section:

Sampling Frequency: 44.1kHz

D-A Conversion: 16-bit linear

Beam Source: Semiconductor laser
(wavelength 780nm)

No. of Channels: 2 channels, stereo

Frequency Response: 20~20,000Hz (+0/-2dB)

S/N Ratio: 79dB (1kHz)
Measure point: speaker out

Wow and Flutter: Unmeasurable

Radio Section:

Frequency Range: FM; 87.5~108MHz
LW; 146~288kHz
MW; 522~1611kHz

Intermediate Frequency: FM; 10.7MHz
AM; 459kHz

Sensitivity: FM; 1.8μV/50mW output
(-3dB Limit Sens)
LW; 180μV/m/50mW output
MW; 140μV/m/50mW output

Tape Deck Section:

Frequency Response: 30~16,000Hz (with normal tape)
30~17,000Hz (with CrO₂ tape)

Tape Speed: 4.8cm/s (1-7/8 ips)

Track System: 4-track 2-channel, stereo

Recording System: AC bias

Erasing System: AC erase

Monitor System: Variable sound monitor

Notes:

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

Panasonic

Matsushita Electric Industrial Co., Ltd.
Central P.O. Box 288, Osaka 530-91, Japan

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SAFETY PRECAUTION (This "safety precaution" is applied only in U.S.A.)

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.

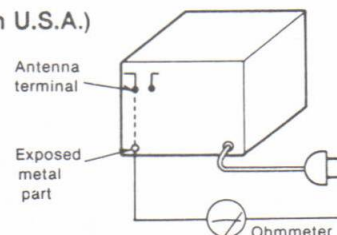


Fig. 1

Resistance = 3 MΩ—5.2 MΩ

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 MΩ and 5.2 MΩ to all exposed parts*. (Fig. 1) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. 2)

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

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.

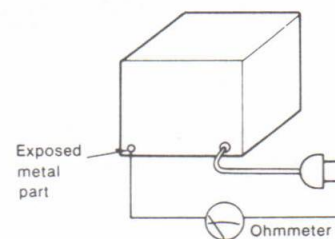


Fig. 2

Resistance = Approx ∞

PRECAUTION OF LASER DIODE

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: 780nm

Maximum output radiation power from pick up: 100μW/VDE

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

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

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

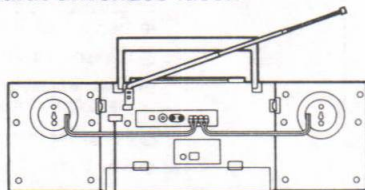
Wellenlänge: 780nm

Maximale strahlungsleistung der lasereinheit: 100μW/VDE

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

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

ADVARSEL: I dette a apparat anvendes laser.



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

(Inside of product)

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

(Im Inneren des Gerätes)

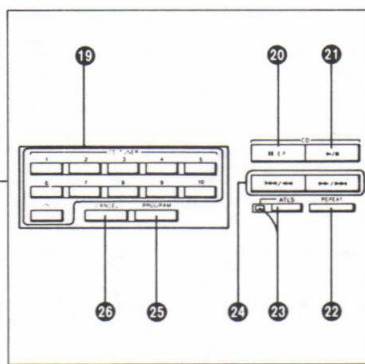
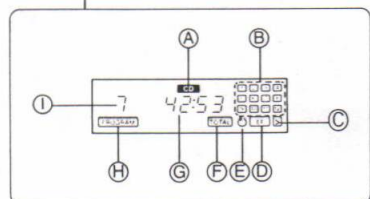
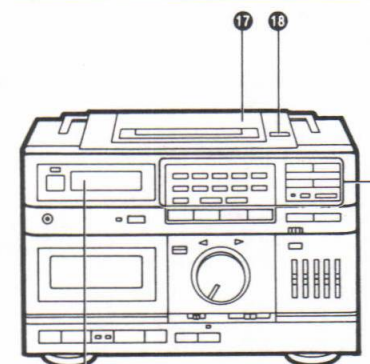
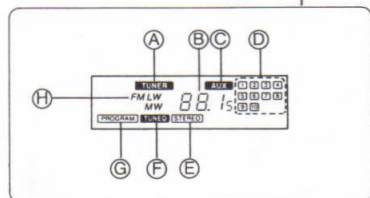
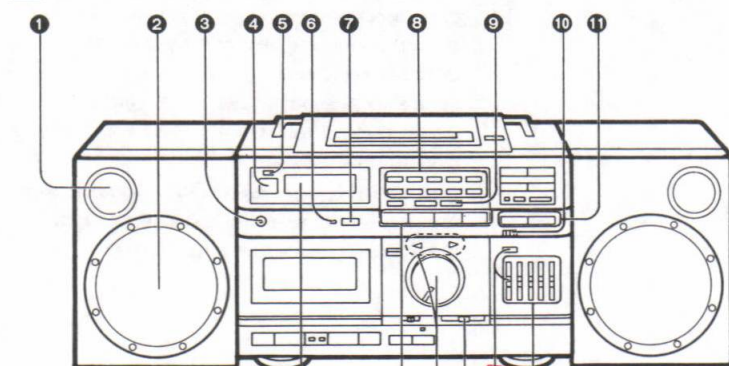


LUOKAN 1 LASERLAITE

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

(Indersiden af apparatet)

LOCATION OF CONTROLS



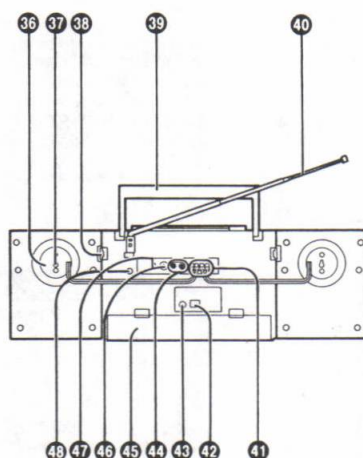
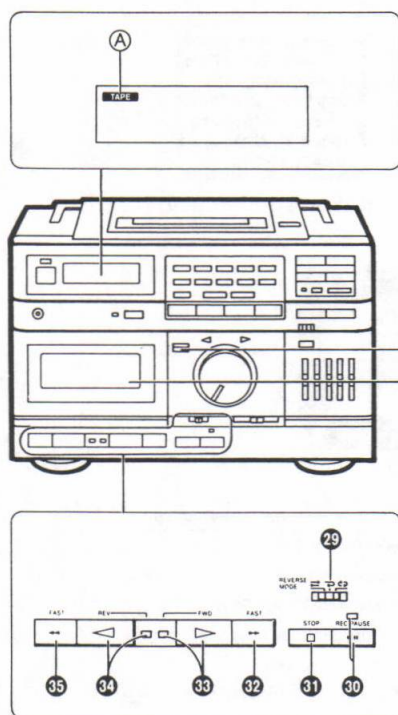
TUNER/GENERAL CONTROLS

- 1 Speakers [Tweeter]
- 2 Speakers [Woofer]
- 3 Headphones Jack (PHONES)
- 4 Remote Control Sensor
- 5 AC Connection Indicator
- 6 Operation/Battery Check Indicator (OPR/BATT)
- 7 Operation Switch (OPERATION)
The operation can also be turned on pressing the Function Selector Button.
- 8 Preset Tuning Buttons (1-10)
- 9 Preset Memory Button (PROGRAM)
- 10 FM Mode/Beat Proof Switch
(FM MODE/B.P: MONO/I, ST/II, ST/III)
- 11 Tuning Buttons (TUNING)
- 12 Graphic Equalizer Controls (GRAPHIC EQUALIZER)
- 13 XBS (Extra Bass System) Switch and Control
(XBS: ON, OFF)
- 14 Balance Control (BALANCE)
- 15 Volume Control and Indicators (VOLUME)
- 16 Function Selector Buttons
(FUNCTION SELECTOR: TAPE, TUNER/BAND, CD, AUX)
"TUNER/BAND" Button can also be used for Band Selector.

- (A) Tuner Mode Indicator (TUNER)
(B) Frequency Display
(C) Auxiliary Mode Indicator (AUX)
(D) Preset Tuning Indicator (1-10)
(E) Stereo Indicator (STEREO)
(F) Tuning Indicator (TUNED)
(G) Preset Memory Indicator (PROGRAM)
(H) Band Indicator (FM, LW, MW)

CD CONTROLS

- 17 Disc Holder
- 18 CD Eject Button (CD EJECT)
- 19 Numeric Buttons (1-10, +10)
- 20 Pause/Edit Pause Button (||/E.P)
- 21 Play/Stop Button (▶/■)
- 22 Repeat Button (REPEAT)
- 23 ATLS (Auto Tape Level Settings) Button and Indicator (ATLS)
- 24 Skip/Search Buttons (◀◀/▶▶)
- 25 Program Button (PROGRAM)
- 26 Cancel Button (CANCEL)
- (A) CD Mode Indicator (CD)
- (B) Music Matrix (1-12)
- (C) Over Mark (>)
- (D) Edit-pause Indicator (EP)
- (E) Repeat Indicator (↺)
- (F) Total Time Indicator (TOTAL)
- (G) Playing Time Display
- (H) Program Indicator (PROGRAM)
- (I) Track Display

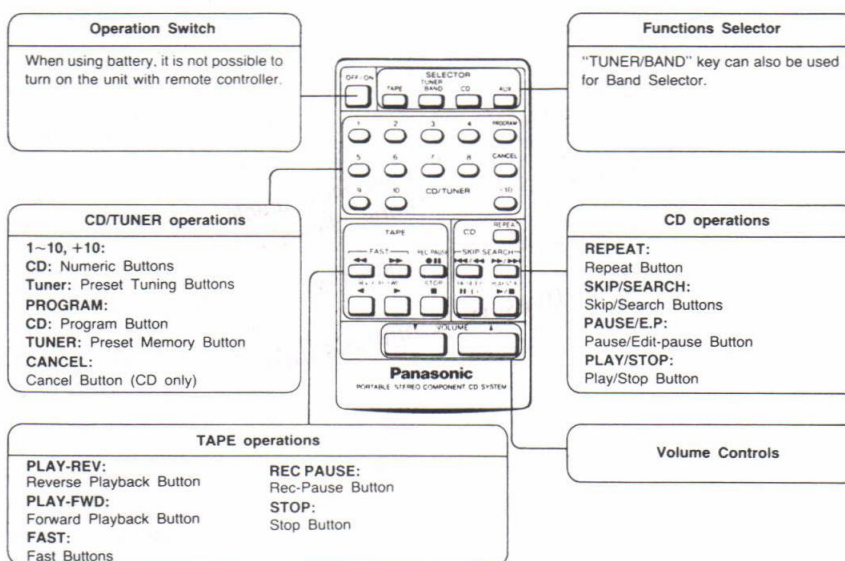


DECK CONTROLS

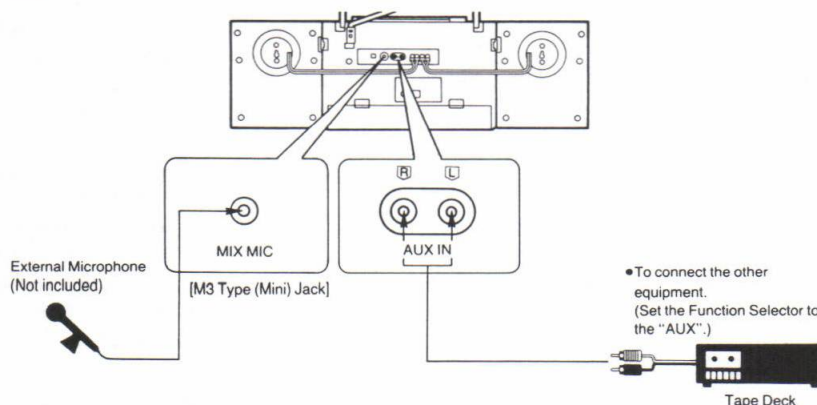
- 27 Eject Button (▲ EJECT)
- 28 Cassette Holder
- 29 Reverse Mode Select Switch (REVERSE MODE: , ,)
- 30 Rec-pause Button and Indicator (REC PAUSE)
- 31 Stop Button (STOP)
- 32 Fast Button (▶▶)
- 33 Forward-side Playback Button and Indicator (FWD)
- 34 Reverse-side Playback Button and Indicator (REV)
- 35 Fast Button (◀◀)
- A Tape Mode Indicator (TAPE)

REAR PANEL

- 36 Speaker Cable Compartments
- 37 Speaker Wall Mounts
- 38 Speaker Release Levers (RELEASE)
- 39 Handle
- 40 Telescopic Antenna
- 41 Speaker Terminals [SPEAKER (IMP 2.7-8Ω)]
- 42 AC Socket (AC IN ~)
- 43 DC Input Jack (DC IN 13.2V: - +)
- 44 Auxiliary Input Jack (AUX IN 200mV/1kΩ)
- 45 Battery Compartment
- 46 Mixing Microphone Jack (MIX MIC: 5mV/600Ω, φ3.5)
- 47 Microprocessor Beat Proof Switch (M.B.P.: I, II)
- 48 FM Antenna Terminal (FM ANT) ... (E) Only



CONNECTIONS

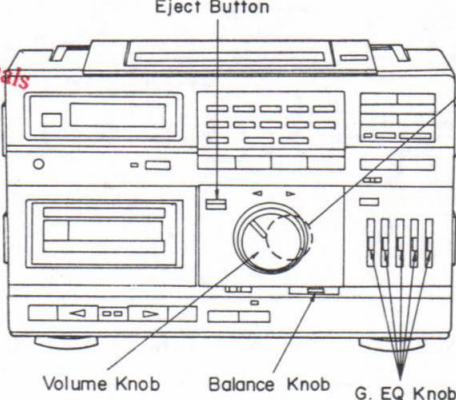
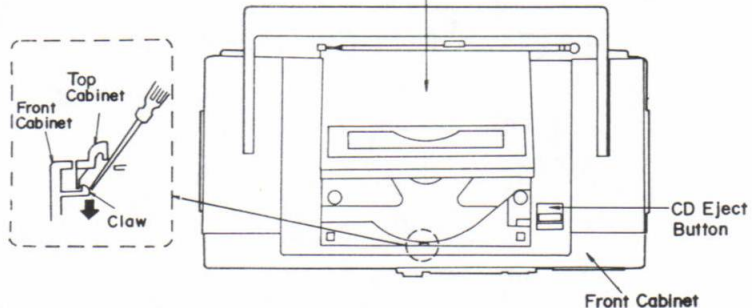
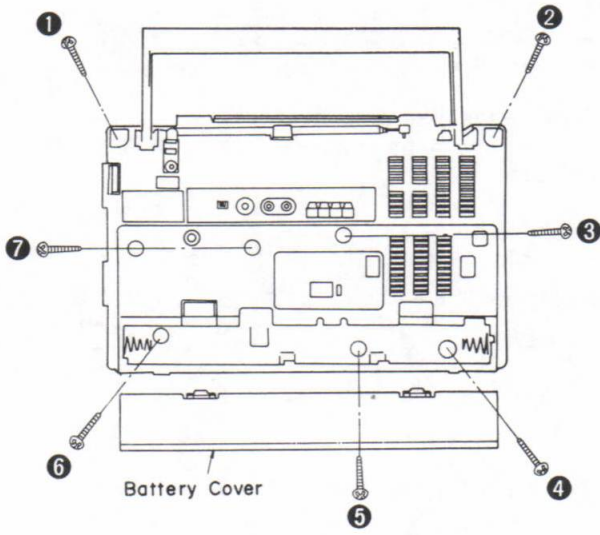
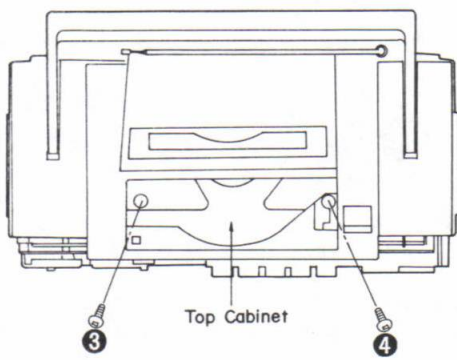


DISASSEMBLY INSTRUCTIONS

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

ACHTUNG:

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

Ref. No. 1	Removal of the Front Cabinet	 3. Remove the G. EQ knobs. 4. Remove the volume knob. 5. Remove the 1 screw (8). 6. Remove the balance knob. 7. Push the eject button.  8. Push the CD eject button. 9. Push the claw, and then remove the front cabinet.
Procedure 1		
 1. Remove the battery cover. 2. Remove the 7 screws (1~7).		
Ref. No. 2	Removal of the Top Cabinet	 • Remove the 4 screws (1~4), and then remove the top cabinet.
Procedure 1→2		

Ref. No.
3

Removal of the LED P.C.B.

Procedure
1→3

• Release the 2 claws, and remove the LED P.C.B.

Ref. No.
5

Removal of the Graphic Equalizer P.C.B.

Procedure
1→2→3→4→5

1. Remove the 1 screw (❶).
2. Remove the 1 flat cable (CS305).

Ref. No.
6

Removal of the Gear Chassis Gear and Gear shaft

Procedure
1→2→3→4→5→6

1. Remove the spring.
2. Remove the 2 screws (❶, ❷).
3. Release the 3 claws in the direction of the arrow ❸.
4. Remove the gear ass'y in the direction of the arrow ❹.
5. Release the 1 claw, and remove the gear in the direction of the arrow ❺.
6. Remove the gear shaft in the direction of the arrow ❻.

Ref. No.
4

Removal of the CD Operation P.C.B. and CD Switch P.C.B.

Procedure
1→2→3→4

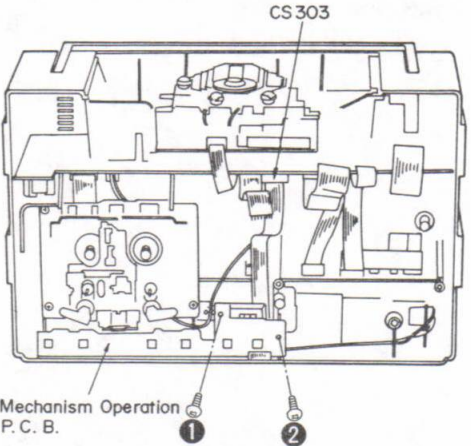
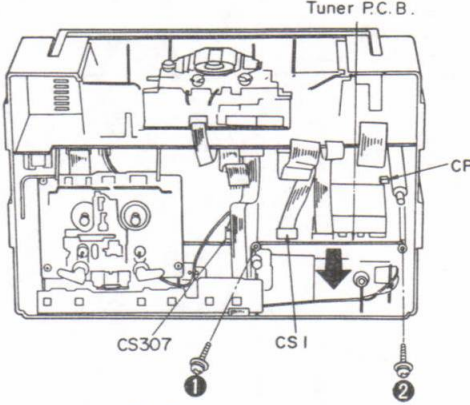
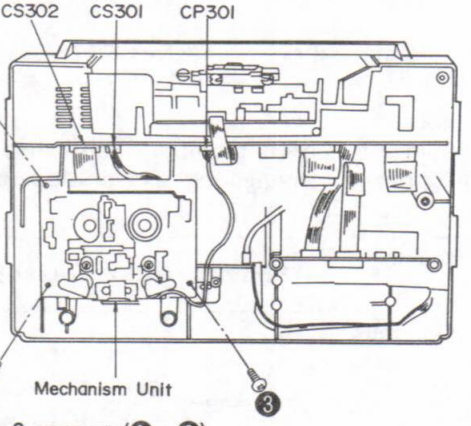
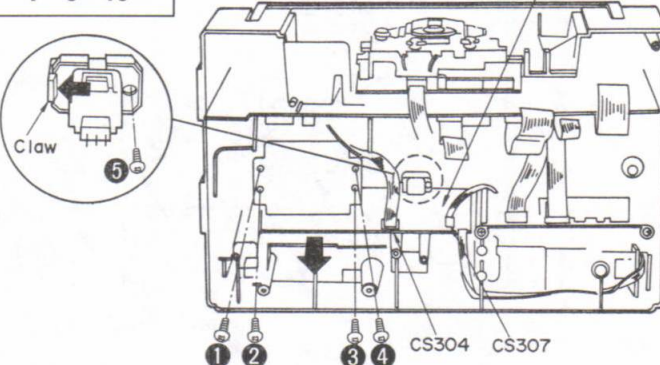
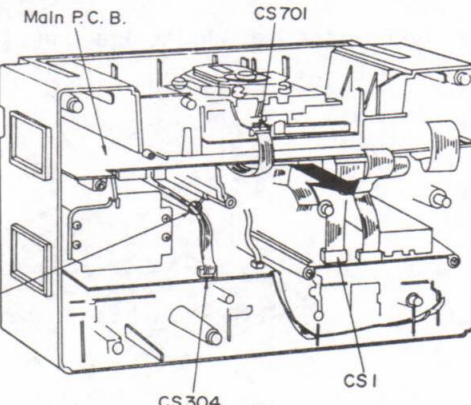
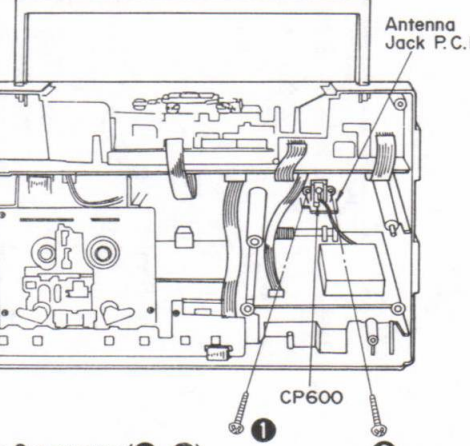
1. Remove the 5 screws (❶~❺).
2. Remove the 4 flat cables (CS801, CS802, CS803, CS306).
3. Pull down the CD operation P.C.B. in the direction of arrow ❶ and then remove it in the direction of arrow ❷.
4. Pull out the switch P.C.B. in the direction of arrow ❸.
5. Remove the 2 flat cables (CS702, CS703).
6. Remove the 1 connector (CP704).

Ref. No.
7

Removal of the CD Operation P.C.B. and CD Switch P.C.B.

Procedure
1→2→3→4→5→6

1. Remove the 5 screws (❶~❺).
2. Remove the 4 flat cables (CS801, CS802, CS803, CS306).
3. Pull down the CD operation P.C.B. in the direction of arrow ❶ and then remove it in the direction of arrow ❷.
4. Pull out the switch P.C.B. in the direction of arrow ❸.
5. Remove the 2 flat cables (CS702, CS703).
6. Remove the 1 connector (CP704).

Ref. No. 7	Removal of the Mechanism Operation P.C.B.	Ref. No. 8	Removal of the Tuner P.C.B.
Procedure 1→2→3→4 →5→7	 1. Remove the 2 screws (①, ②). 2. Remove the 1 flat cable (CS303).	Procedure 1→2→3→4 →5→8	 1. Remove the 2 screws (①, ②). 2. Remove the 2 flat cable (CS1, CS307). 3. Pull out the tuner P.C.B. 4. Remove the 1 connector (CP1).
Ref. No. 9	Removal of the Mechanism Unit	Ref. No. 10	Removal of the Power Supply P.C.B.
Procedure 7→9	 1. Remove the 3 screws (①~③). 2. Remove the 2 flat cables (CS301, CS302). 3. Remove the 1 connector (CP301).	Procedure 7→9→10	 1. Remove the 5 screws (①~⑤). 2. Remove the 2 flat cables (CS304, CS307). 3. Release the 1 claw. 4. Pull out the power supply P.C.B. in the direction of arrow.
Ref. No. 11	Removal of the Main P.C.B.	Ref. No. 12	Removal of the Antenna Jack P.C.B.
Procedure 7→9→11	 1. Remove the 3 flat cables (CS1, CS304, CS701). 2. Pull out the main P.C.B. in the direction of arrow.	Procedure 1→2→3→4 →5→12	 1. Remove the 2 screws (①, ②). 2. Remove the 1 connector (CP600).

Ref. No.
13

Removal of the CD Player Unit

Precedure
1→2→13

1. Remove the 4 screws (①~④).

2. Remove the 4 flat cables (CS701, CS702, CS703).

3. Remove the 1 connector (CP704).

Ref. No.
15

Removal of the Battery P.C.B.

Precedure
7→9→15

1. Cut off adhesives with a cutter.

2. Pull out the battery blocking (A) P.C.B.

3. Release the claw and remove the battery blocking (B) P.C.B. in the direction of arrow.

Precedure
1→9→15

4. Release the claw and remove the battery P.C.B. in the direction of arrow.

Ref. No.
14

Removal of the CD P.C.B.

Precedure
1→2→13→14

1. Release the 2 claws.

2. Remove the 4 connectors (CP701, CP702, CP703, CS705).

Note:

- Insert a shorting chip to the flexible P.C.B. so as to prevent damages to the laser diode by static electricity.

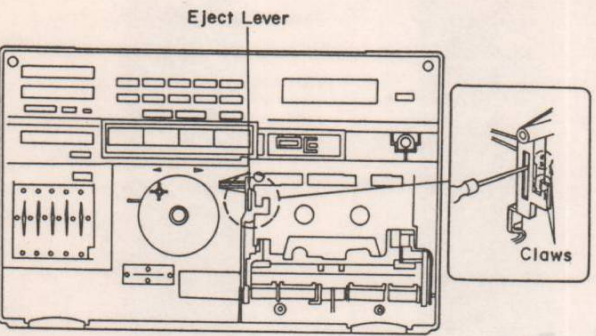
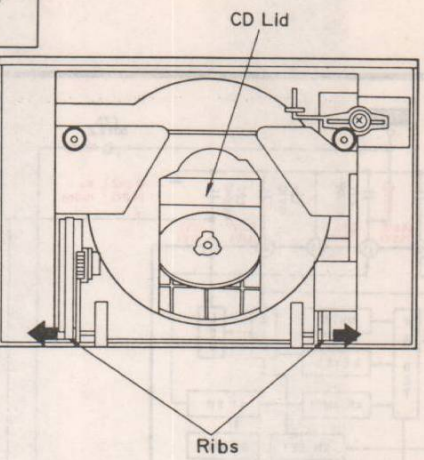
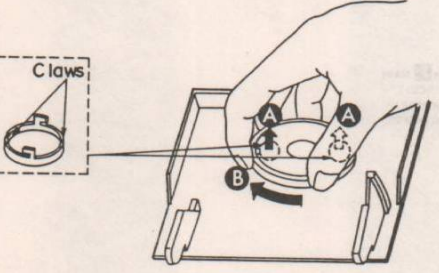
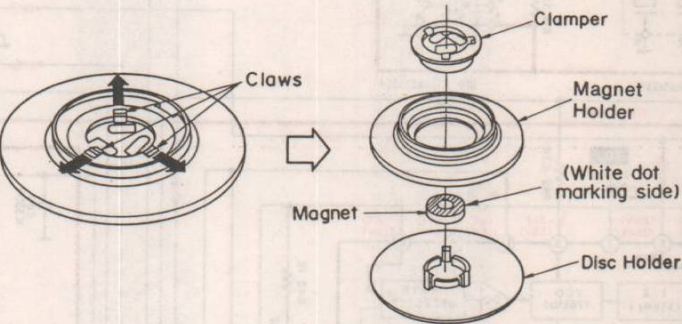
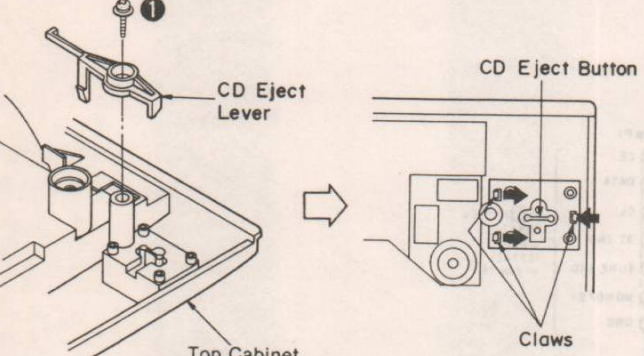
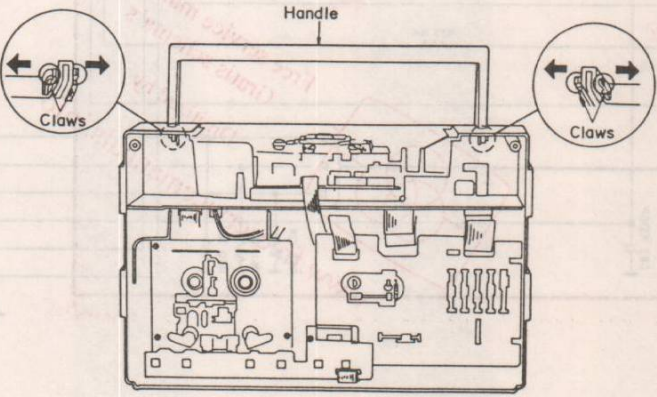
Ref. No.
16

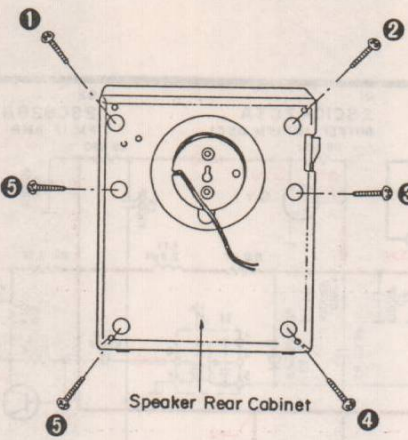
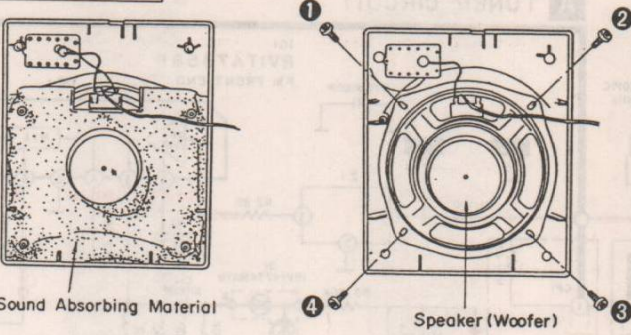
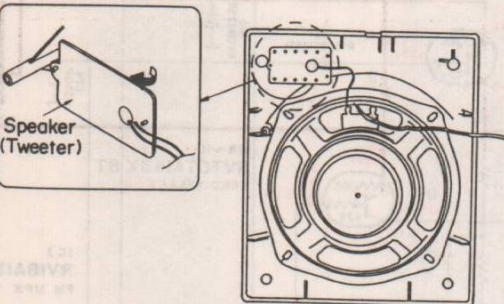
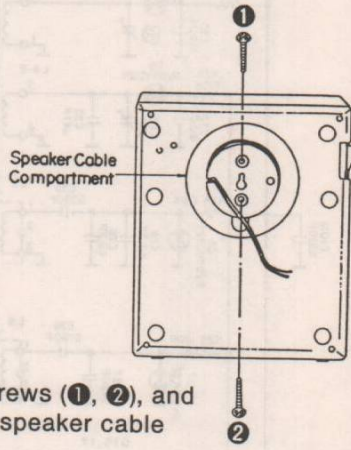
Removal of the Cassette Lid

Precedure
1→16

1. Remove the 2 ribs in the direction of arrows.

2. Remove the cassette lid in the direction of arrow.

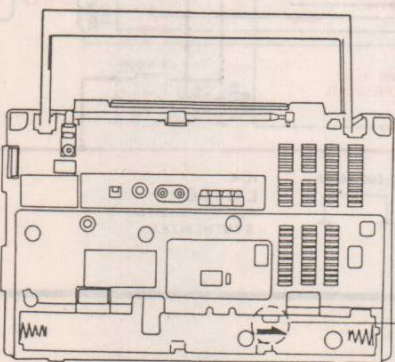
Ref. No. 17 Removal of the Eject Lever Precedure 1→17  • Remove the 2 claws.	Ref. No. 18 Removal of the CD Lid Precedure 1→2→18  • Remove the ribs in the direction of the arrows.
Ref. No. 19 Removal of the Magnet Holder Precedure 1→2→18→19  • While lifting the magnet holder in the direction of the arrow A, rotate magnet holder in the direction of the arrow B and remove the magnet holder.	Ref. No. 20 Removal of the disc holder and magnet Precedure 1→2→18→19→20  • Remove the 3 claws, and remove the magnet.
Ref. No. 21 Removal of the CD Eject Button Precedure 1→2→18→21  1. Remove the 1 screw (1). 2. Remove the CD eject lever. 3. Release the 3 claws, and remove the CD eject button.	Ref. No. 22 Removal of the Handle Precedure 22  • Remove the 4 claws in the direction of arrow and then remove the handle.

Ref. No. 23 Removal of the Speaker Rear Cabinet Precedure 23  • Remove the 6 screws (1~6), and remove the speaker rear cabinet.	Ref. No. 24 Removal of the Speaker (Woofer) Precedure 23→24  1. Remove the sound absorbing material. 2. Remove the 4 screws (1~4), and remove the speaker.
Ref. No. 25 Removal of the Speaker (Tweeter) Precedure 23→25  • Remove the tweeter in the direction of the arrow.	Ref. No. 26 Removal of the Speaker Cable Compartment Precedure 26  • Remove the 2 screws (1, 2), and then remove the speaker cable compartment.

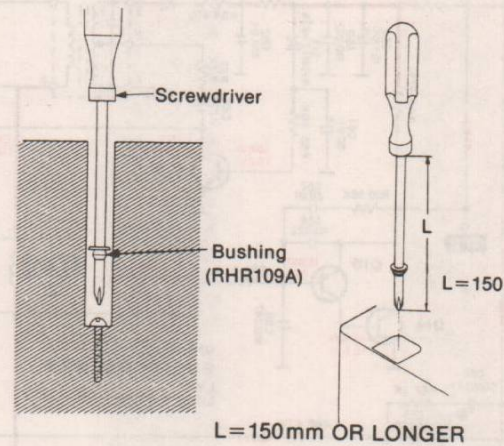
● REMOVAL OF SCREWS

- Use a screwdriver similar to the one in the figure.
- If you attach a bushing (part number: RHR109A) to the tip of the screwdriver as shown in the figure, the screwdriver tip will easily fit in the screw heads and you will be able to remove the screws with ease.

● WHAT TO DO WHEN THE TAPE IS ENTANGLED



When the tape is caught in the pinch roller, etc. release the tape by turning the pulley on the motor with the screwdriver in the direction of the arrow.

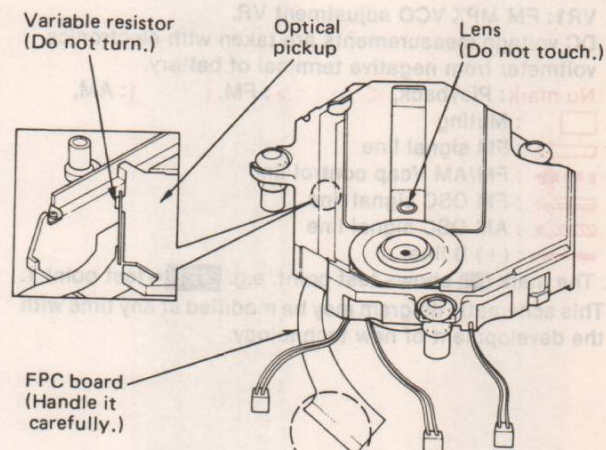


■ HANDLING PRECAUTIONS FOR OPTICAL PICKUP

The laser diode in the 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 optical pickup.

● Handling of traverse deck (optical pickup)

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



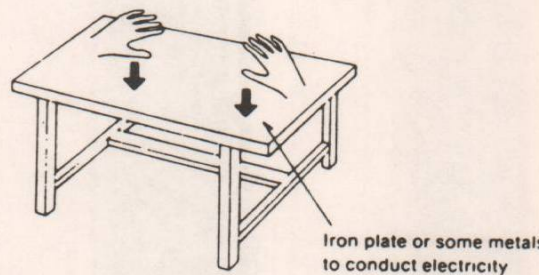
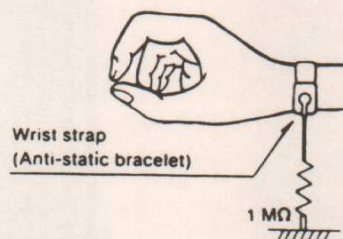
Be sure to short this position.
(Use the shorting pin or clip.)
Free service manuals
Gratis schema's
Digitized by
www.freesevicemanuals.info

● 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 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 optical pickup



(See parts list on pages 51~53, 63~66.)

1. **VR1:** FM MPX VCO adjustment VR.
2. DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.

FM/AM Vcap control line

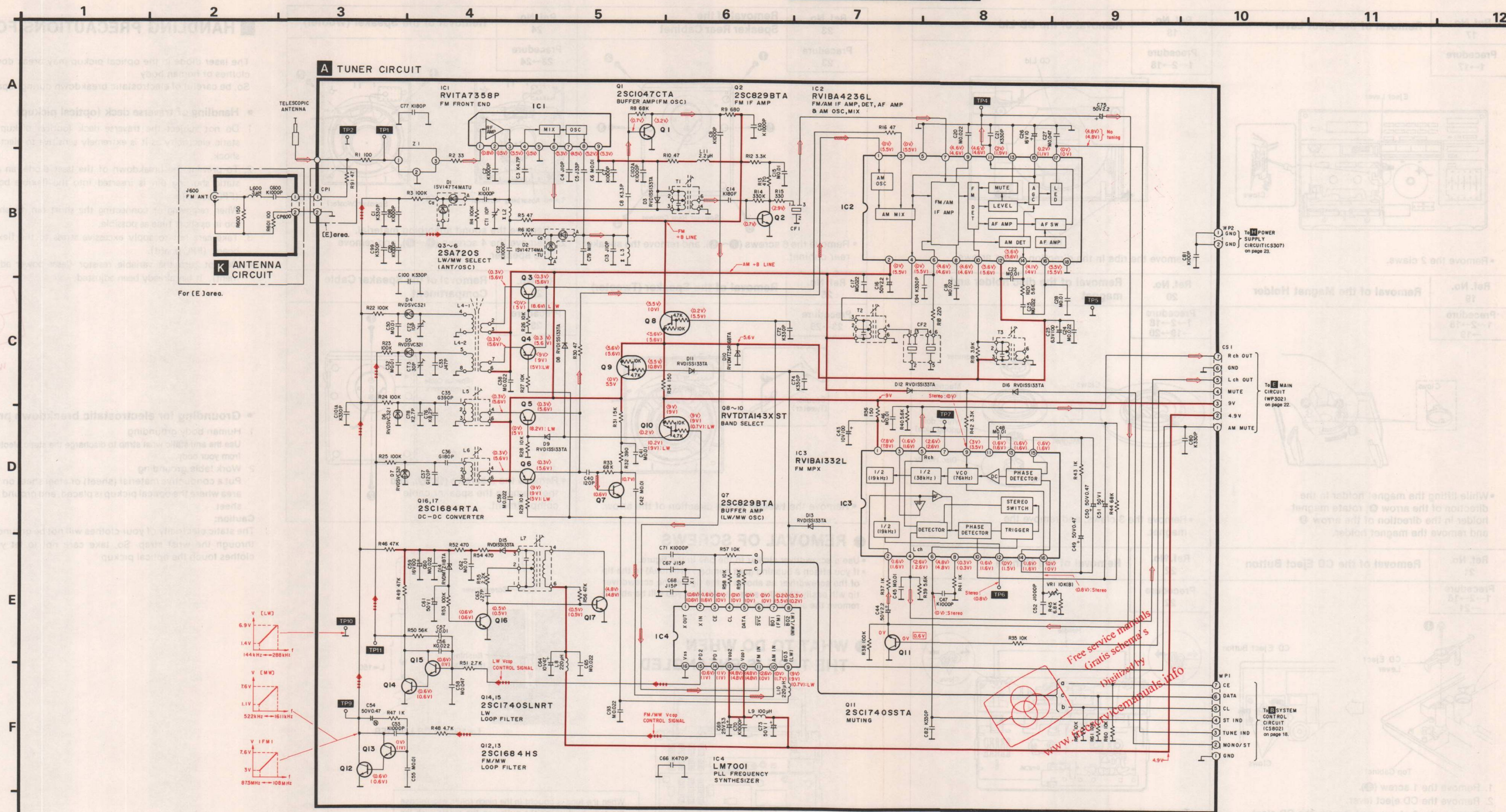
 : FM OSC signal line

 : FM OSC signal line
 : AM OSC signal line

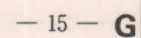
- AM USC S
- ($\pm$) B line

The mark (■) shows test point, e.g. TP1 = test point 1.

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



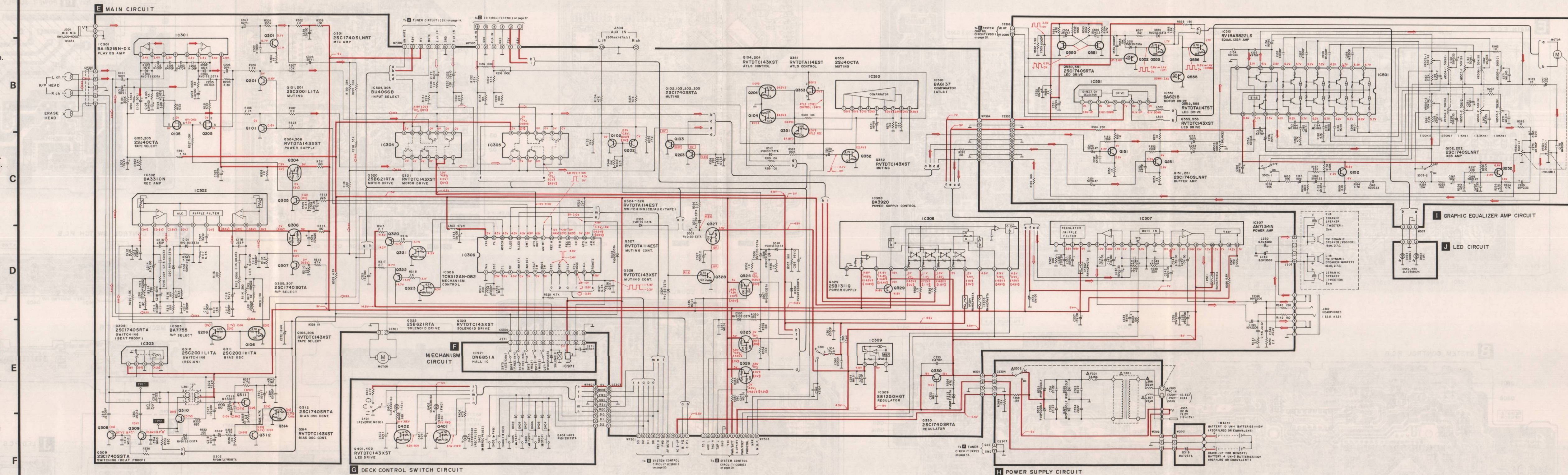
The mark (■) shows test point. e.g. TP1 = test point 1.
This schematic diagram may be modified at any time with the development of new technology.



(See parts list on pages 51~53, 63~66.)

Notes:

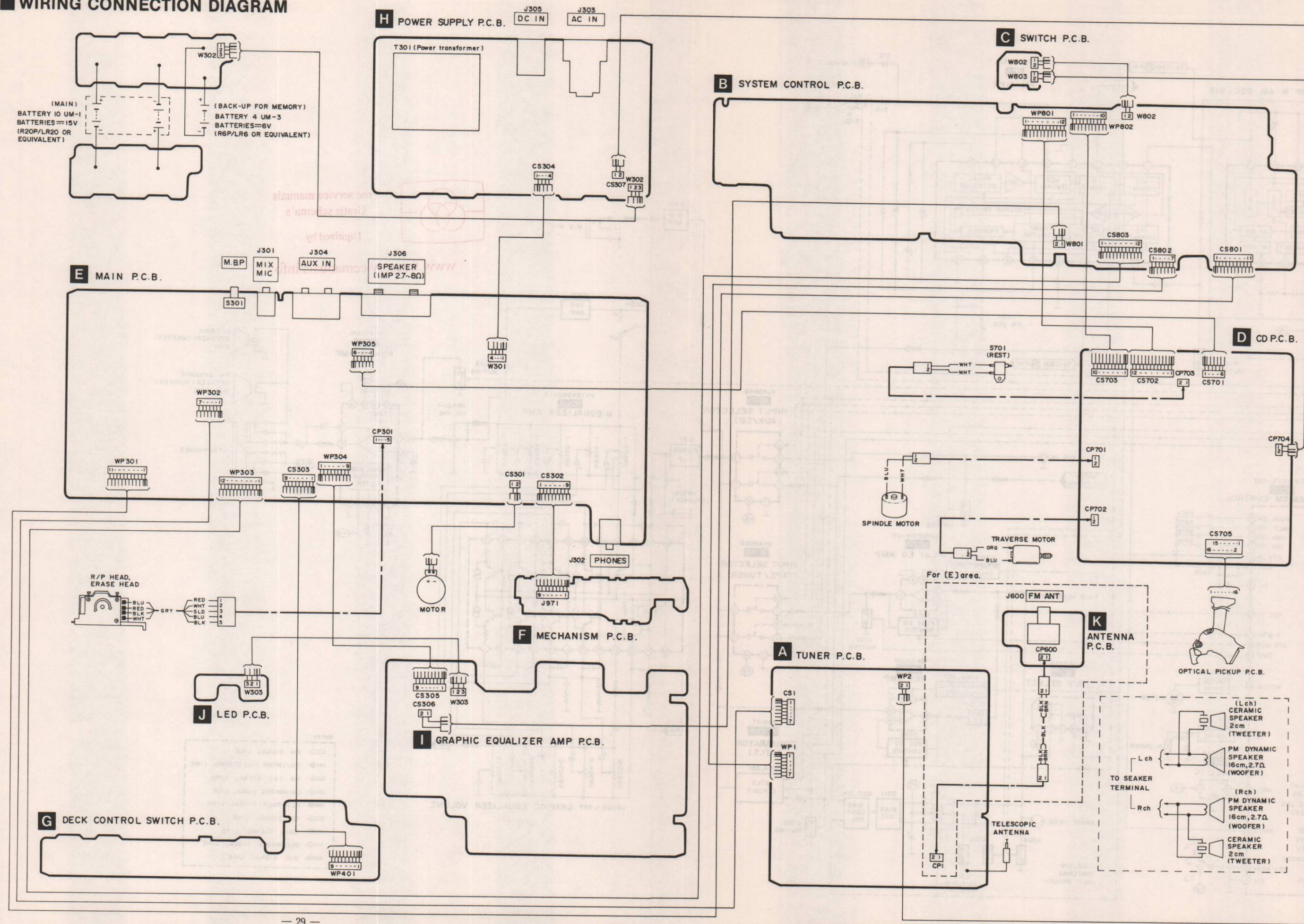
1. **S301** : Microprocessor beat switch in "II" position.
2. **S302** : AC/DC select switch in "AC" position.
3. **S303-1, 303-2**: XBS switch in "OFF" position.
4. **S401** : Reverse mode select switch in "↔" position
(↺ ...Auto-continous, ↔ ...Auto-reverse, ↔ ...Non-reverse)
5. **S402** : Rec pause switch.
6. **S403** : Forward playback switch.
7. **S404** : Reverse playback switch.
8. **S405** : Fast switch. (▶▶)
9. **S406** : Fast switch. (◀◀)
10. **S407** : Stop switch.
11. **S971** : Mode switch in "OFF" position.
12. **S972** : Cassette half detection switch in "OFF" position.
13. **S973** : Reverse rec. inhibit switch in "OFF" position.
14. **S974** : Forward rec. inhibit switch in "OFF" position.
15. **S975** : ATS/CrO₂ switch in "OFF" position.
16. **VR501-1, 501-2**: Volume control.
17. **VR502** : Balance control VR.
18. **VR503-1, 503-2**: Graphic EQ. (100Hz) control VR.
19. **VR504-1, 504-2**: Graphic EQ. (330Hz) control VR.
20. **VR505-1, 505-2**: Graphic EQ. (1kHz) control VR.
21. **VR506-1, 506-2**: Graphic EQ. (3.3kHz) control VR.
22. **VR507-1, 507-2**: Graphic EQ. (10kHz) control VR.
23. DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.
- No mark**: Playback, **I** : Recording, **F** : Tuner,
(): CD, **II** : AUX
- : FM signal line, **→** : Playback signal line,
→ : CD signal line, **→** : Main signal line,
→ : Recording signal line, **→** : MIC signal line,
→ : (+) B line
24. Battery current:
- No signal (Radio) ... **160 mA (VR MIN)**
maximum output (VR MAX)
- Radio **1.9 A**
Tape (PLAY) **2.13 A**
CD Play (0dB) **2.18 A**
- Measurement instruction
{Radio: FM 60dB, 30% Mod.}
Tape: 315 Hz, 0dB
25. The mark (■) shows test point. e.g. **TP1** = test point 1.
26. Important safety notice.
- Components identified by Δ mark have special characteristics important for safety.
- When replacing any of these components, use only manufacturer's specified parts.
- This schematic diagram may be modified at any time with the development of new technology.



18 19

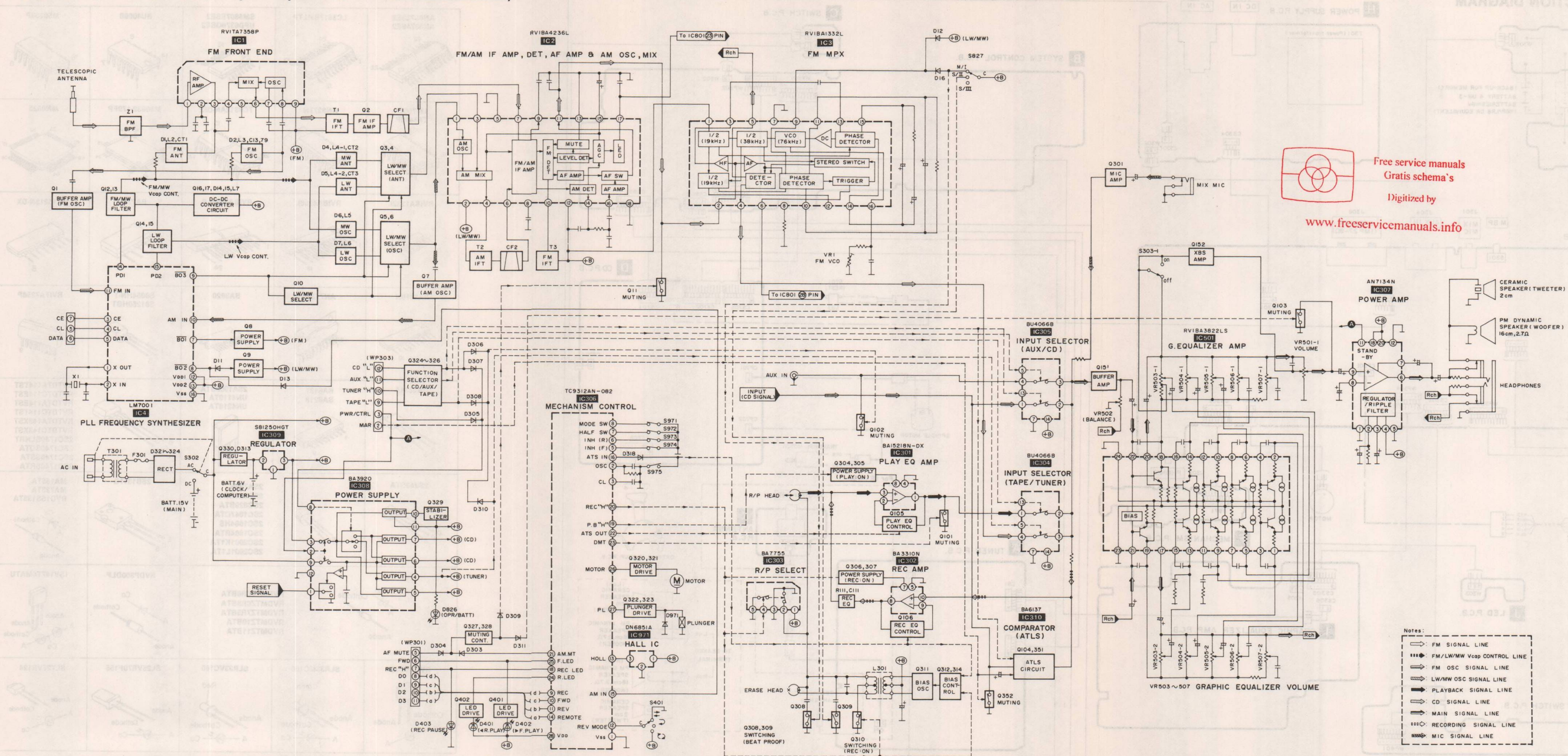


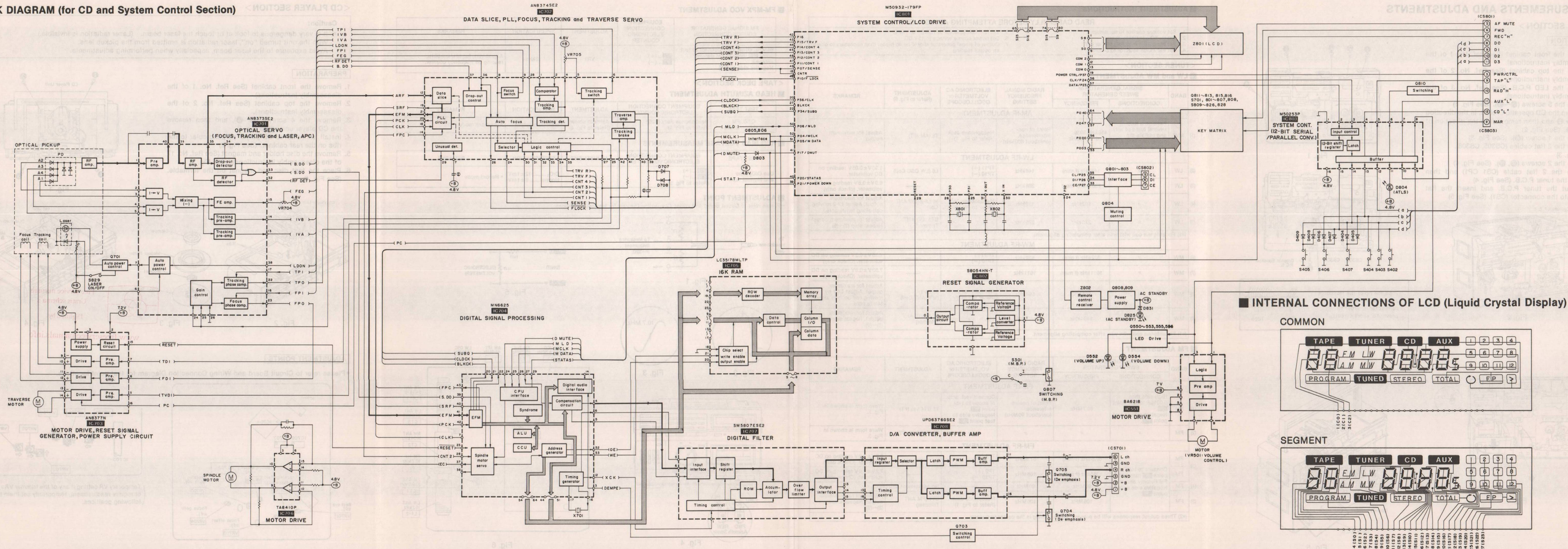
WIRING CONNECTION DIAGRAM



TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

AN8373SE2 AN8374SE2 	LC3517BMLTP 	SM5807ESE2 UPD6378GSE2 	BU4066B 	M50253P
LM7001 TA8410P 	AN8377N 	TC9312AN-082 	M50932-179FP 	MN6625
RV1BA1332L 	RV1BA4236L 	RV1BA3822LS 	BA7755 	BA15218N-DX
BA3310N 	AN7134N 	BA3920 	S8054HN-T S81250HGT 	RV1TA7358P
DN6851A 	BA6137 BA6218 	2SA1309STA UN4110TA UN4216TA 	RVTDTA114TST RVTDTA114EST RVTDTA114TST RVTDTA143XST RVTDTA143XST 2SC1740SLNRT 2SC1740SSTA 2SC1740SRSTA 	
2SJ40CTA 	2SA720S 2SB621RTA 2SC829BTA 2SC1047CTA 2SC1684HS 2SC1684RTA 2SC2001K1TA 2SC2001L1TA 	2SB1311Q 	MA165TA MA723TA RVD1SS133TA 	
		RVDP300DLF 	1SV147T4MATU 	
RVDSVC321 	SLR33MC160 	SLR33VC160 	SL25VR70F155 	SLT25VR124

BLOCK DIAGRAM (for Tuner, Main, Graphic Equalizer and Mechanism Section)

BLOCK DIAGRAM (for CD and System Control Section)

MEASUREMENTS AND ADJUSTMENTS

<TUNER SECTION>

PREPARATION

1. Remove the front cabinet (See Ref. No. 1 of the disassembly instructions).
2. Remove the top cabinet (See Ref. No. 2 of the disassembly instructions).
3. Remove the LED P.C.B. (See Ref. No. 3 of the disassembly instructions).
4. Remove the 5 screws (1~5). (See Fig. 1)
5. Pull down the CD operation P.C.B. in the direction of arrow ① and then remove it in the direction of arrow ②. (See Fig. 2)
6. Remove the 1 screw (6). (See Fig. 3)
7. Remove the 2 flat cables (CS305, CS306). (See Fig. 3)
8. Remove the 2 screws (7, 8). (See Fig. 4)
9. Remove the 2 flat cable (CS1 CP1) and then remove the tuner P.C.B. (See Fig. 4)
10. Take out the tuner P.C.B. and insert the flat cable into the connector (CS1). (See Fig. 5)

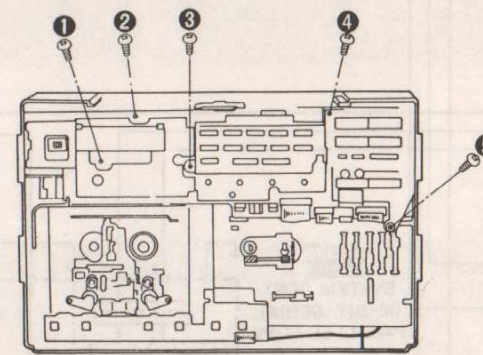
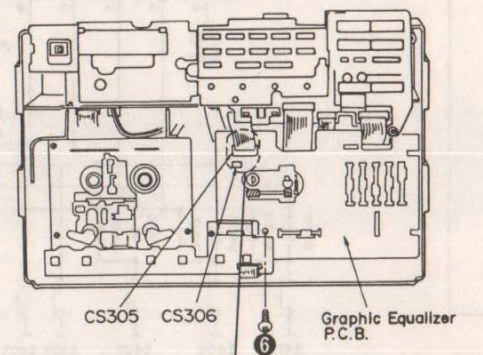


Fig. 1



Tape the tip of the flat cable disconnected from the connector in order to prevent a short circuit.

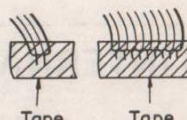


Fig. 3

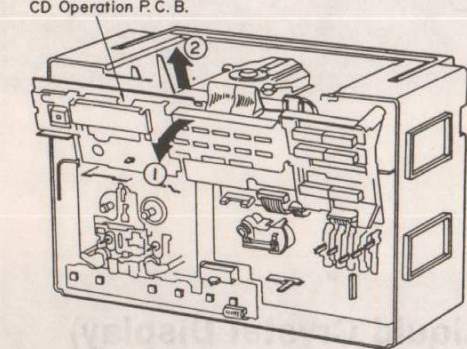


Fig. 2

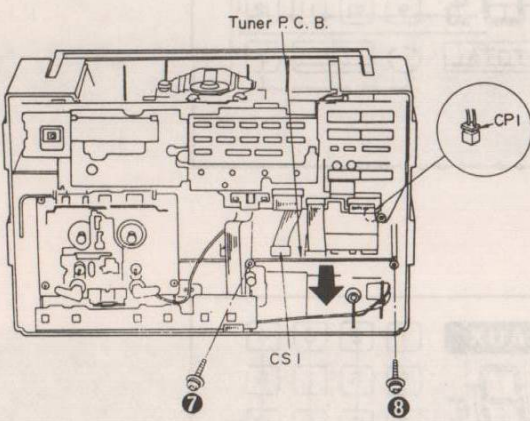


Fig. 4

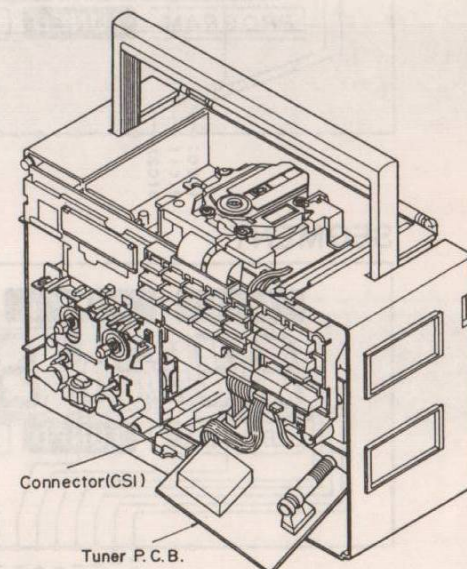


Fig. 5

ADJUSTMENT INSTRUCTIONS

READ CAREFULLY BEFORE ATTEMPTING ADJUSTMENT

1. Set volume control to maximum.
2. Set G. EQ control to center.
3. Set band switch to FM, MW or LW.
4. Set FM mode selector to STEREO.
5. Set function selector to TUNER or TAPE.
6. Set power source voltage to 15V DC.
7. Output of signal generator should be no higher than necessary to obtain an output reading.

<TUNER SECTION>

LW and MW ADJUSTMENT

BAND	SIGNAL GENERATOR or SWEEP GENERATOR	RADIO SIGNAL FREQUENCY SETTING	ELECTRONIC AC VOLTMEETER or OSCILLOSCOPE	ADJUSTMENT (Refer to Fig. 6)	REMARKS
AM-IF ADJUSTMENT					
(1) MW	Fashion a loop of several turns of wire and radiate the signal into loop ANT of the receiver.	459kHz 30% Mod. at 400Hz	Point of non-interference. (on/about 600kHz)	Headphones Jack (Refer to Fig. 1)	T2 (AM IFT)
LW-RF ADJUSTMENT					
(2) LW	"	146kHz (f min)	146kHz	TP11 (+) TP10 (-)	L6 (LW OSC Coil)
(3) LW	"	288kHz (f max)	288kHz	"	"
(4) LW	"	162kHz	162kHz	Headphones Jack (Refer to Fig. 1)	(*) L4-2 (LW ANT Coil)
(5) LW	"	270kHz	270kHz	"	CT3 (LW ANT Trimmer)
MW-RF ADJUSTMENT					
(6) MW	"	522kHz (f min)	522kHz	TP9 (+) TP10 (-)	"
(7) MW	"	1611kHz (f max)	1611kHz	"	"
(8) MW	"	594kHz	594kHz	Headphones Jack (Refer to Fig. 1)	(*) L4-1 (MW ANT Coil)
(9) MW	"	1404kHz	1404kHz	"	CT2 (MW ANT Trimmer)

FM ADJUSTMENT

BAND	SIGNAL GENERATOR or SWEEP GENERATOR	RADIO SIGNAL FREQUENCY SETTING	ELECTRONIC AC VOLTMEETER or OSCILLOSCOPE	ADJUSTMENT	REMARKS
FM-IF ADJUSTMENT					
(1) FM	High side thru. 0.001μF to test point TP9. Negative side to test point TP10.	10.7 MHz	Point of non-interference. (on/about 90 MHz)	Connect vert. amp. of scope to test point TP9. Negative side to test point TP10.	T1 (FM 1st IFT)
(2) FM	"	"	"	"	T3 (FM 2nd IFT)
FM-RF ADJUSTMENT					
(3) FM	Connect to test point TP9 through FM dummy antenna. Negative side to test point TP10.	87.5kHz (f min)	87.5kHz	TP9 (+) TP10 (-)	2.7V ± 1.0V reading on DC voltmeter. (Check only)
(4) FM	"	108 MHz (f max)	108 MHz	TP9 (+) TP10 (-)	7.2V ± 1.0V reading on DC voltmeter. (Check only)
(5) FM	"	90 MHz	90 MHz	"	No adjustment and check.
(6) FM	"	106 MHz	106 MHz	Headphones Jack (Refer to Fig. 1)	CT1 (FM ANT Trimmer)

(*)2 Three output responses will be present; proper tuning is the center frequency.

FM-MPX VCO ADJUSTMENT

FM SIGNAL GENERATOR SOURCE CONNECTION	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
98 MHz, 60dB (CW) Connect to test point TP9 through FM dummy antenna. Negative side to TP10.	TP9 ... (+) TP10 ... (-)	VR1	19 kHz	Adjust VR1, for 19 kHz ± 50 Hz reading on frequency counter.

<TAPE DECK SECTION>

HEAD AZIMUTH ADJUSTMENT

TEST TAPE	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
QZZCFM (8kHz, -20dB)	Headphones Jack (32Ω) (Refer to Fig. 1)	Azimuth screw (Refer to Fig. 4)	Maximum output	• Playback mode.

REC BIAS VOLTAGE MEASUREMENTS

TEST TAPE	EQUIPMENT CONNECTION ELECTRONIC VOLTMEETER	ADJUSTMENT	SPECIFICATION	REMARKS
Use CrO ₂ tape and Normal tape	TP11 ... (+) TP12 ... (-) (Refer to Fig. 5)	—	CrO ₂ 12 ± 1 mV Normal 8 ± 1 mV	• Record mode

ADJUSTMENT POINT

• Please refer to Circuit Board and Wiring Connection Diagram for test point locations.

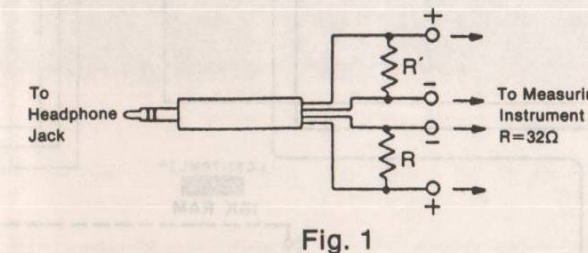


Fig. 1

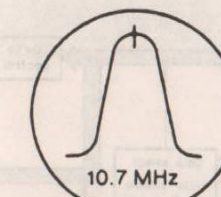


Fig. 2

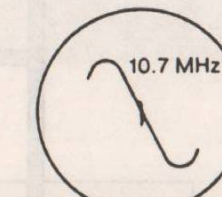


Fig. 3

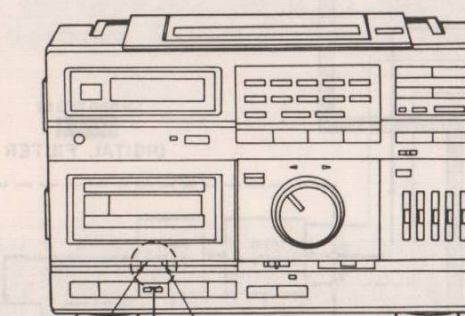


Fig. 4

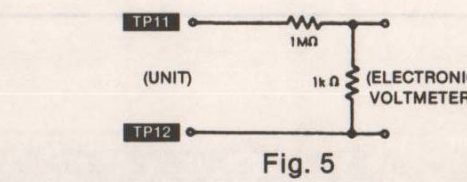


Fig. 5

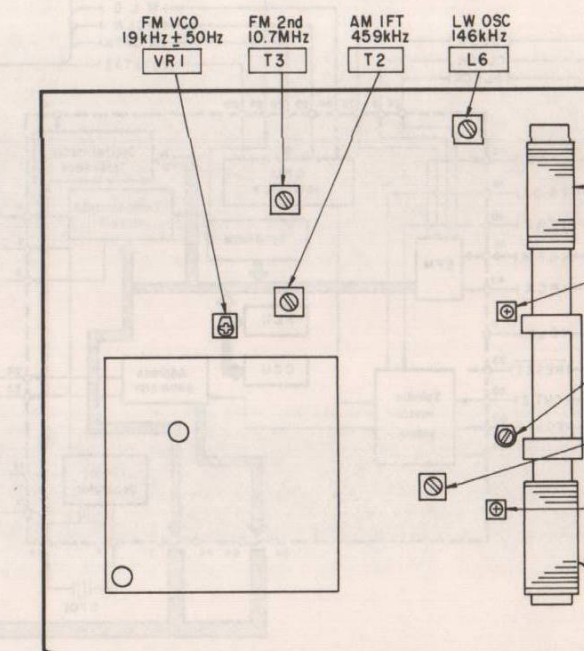


Fig. 6

<CD PLAYER SECTION>

Caution:

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

PREPARATION

1. Remove the front cabinet (See Ref. No. 1 of the disassembly instructions).
2. Remove the top cabinet (See Ref. No. 2 of the disassembly instructions).
3. Remove the 4 screws (1~4), and then remove the CD player unit. (See Fig. 1)
4. Install the removed CD player perpendicular to the ribs on the rear cabinet. (See Fig. 2)
5. Remove the disc holder and magnet (See Ref. No. 17 of the disassembly instructions). (See Fig. 3)
6. Place the test disc and magnet on the turntable. (See Fig. 4)

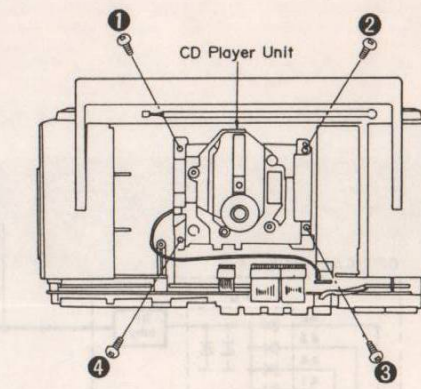


Fig. 1

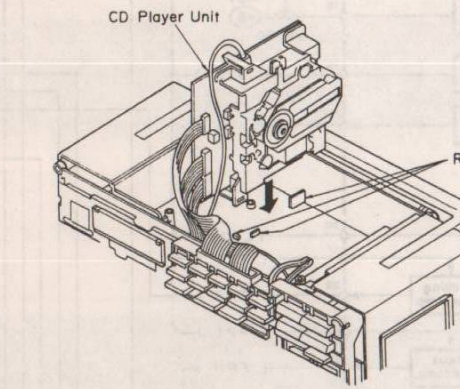


Fig. 2

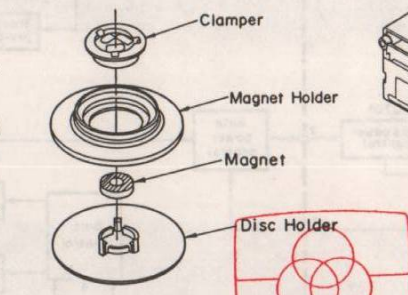


Fig. 3

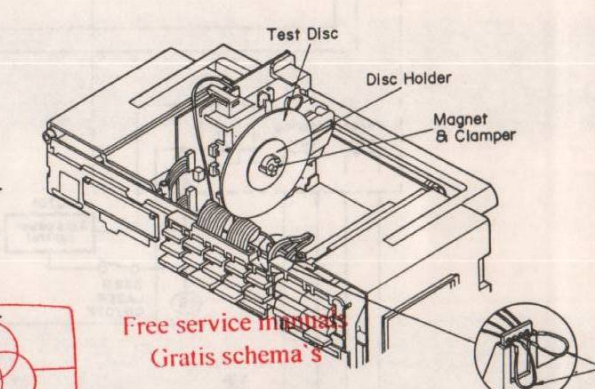
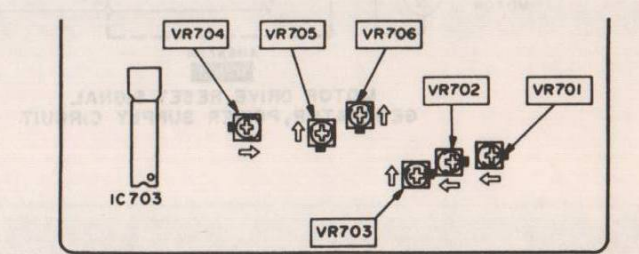
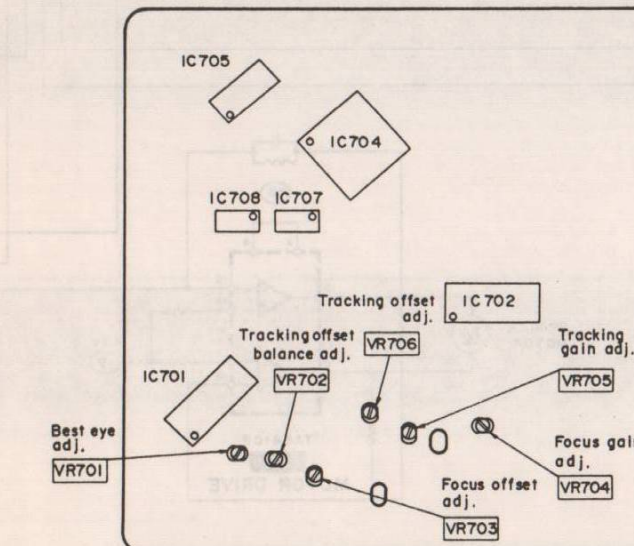


Fig. 4

ADJUSTMENT POINTS

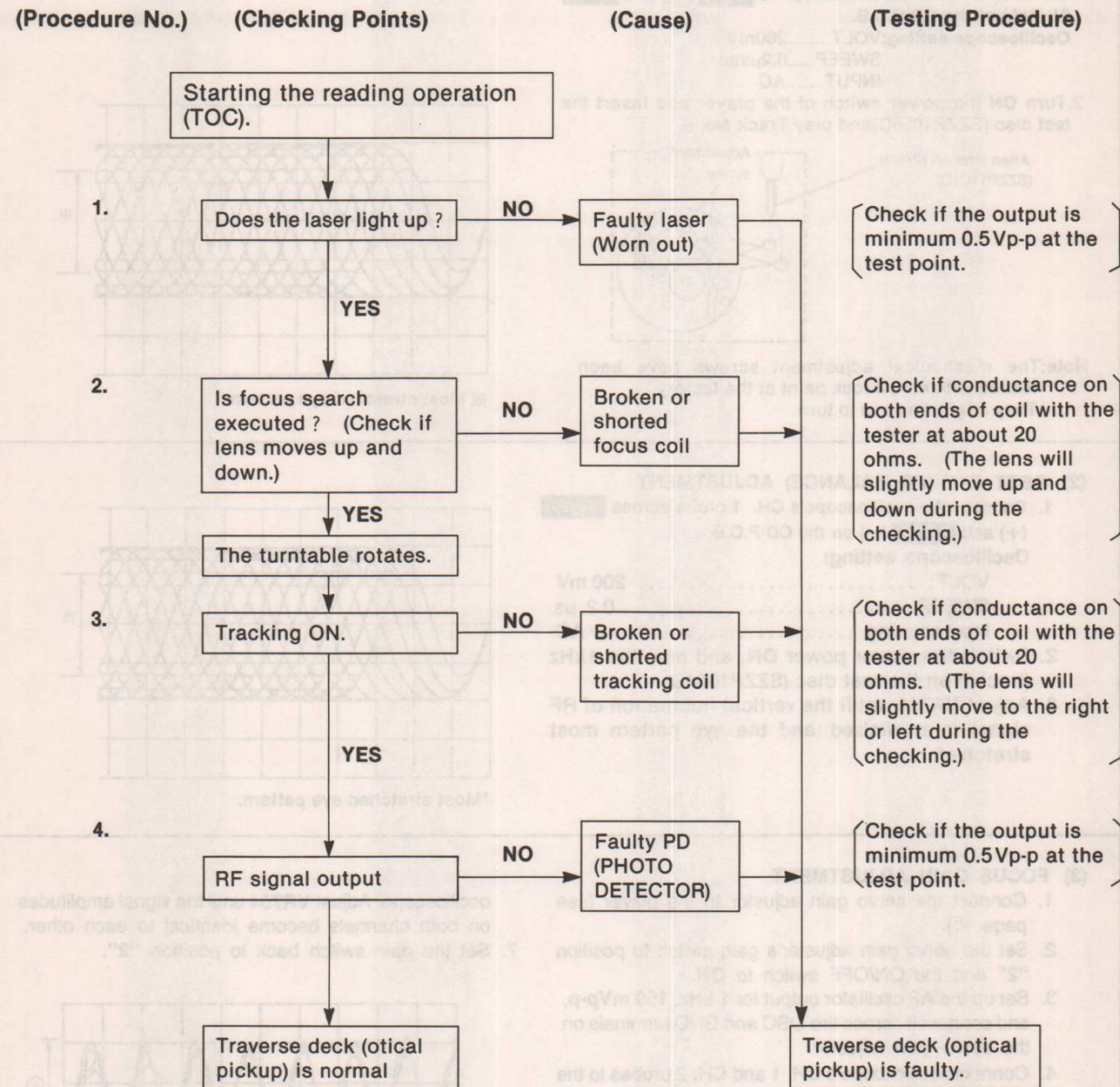
• Please refer to Circuit Board and Wiring Connection Diagram for test point locations.



(Temporary VR setting if any of the trimmer VRs are replaced or require readjustment, temporarily set them to the following positions.)

■ CHECKING THE OPERATION PROBLEMS ON THE TRAVERSE DECK (OPTICAL PICKUP)

Make sure to follow the procedures below to check the operation problems of the traverse deck (optical pickup) before replacing it. Replace the traverse deck only after the problem is identified.



※ Replace traverse deck.

- Check electrical circuit.
- CD is not adjusted properly. Adjust CD again.
 - (1) Mechanical adjustment.
 - (2) Focus balance adjustment (PD balance)
 - (3) Focus gain adjustment.
 - (4) Tracking gain adjustment.
 - (5) Focus offset adjustment.
 - (6) Tracking offset adjustment.
 - (7) Tracking balance adjustment.
- Check for flaws on disc or if it is warped or not centered.

Refer to pp.46~48

※ Checking Operations of Replaced Traverse Deck (New Traverse Deck)

a) Check the operations described below on the traverse deck after replacing it.

- * Checking Skip Search
 1. Play an ordinary musical program disc.
 2. Press the skip button to check for normal skip search operation (in both the forward and reverse directions).
- * Checking Manual Search
 1. Play an ordinary musical program disc.
 2. Press the manual search button to check for smooth manual search operations at either low or high speed (in both the forward and reverse directions).

- * Checking Using Defect Disc
 1. Play the 0.7 mm black dot and the 0.7 mm wedge on the defect test disc (SZZP1054C) and verify that no sound skip or noise occurs.
 2. Play the middle tracks of the uneven test disc (SZZP1056C) and verify that no sound skip or noise occurs.

b) If the operations are normal, CD adjustments are not required when the traverse deck is replaced.

Note: CD adjustments are required in the cases below. (Mechanical adjustments are not necessary.)
(See item 2-7 on pp. 46~48.)

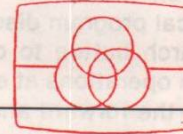
- If audio is not played back continuously or noises occur after step (a) is executed.
- If the adjustment VRs (VR701~VR706) were rotated before the traverse deck was replaced.
- If the ICs in the servo circuit or adjustment VRs were replaced.

ELECTRICAL ADJUSTMENTS

Measuring Instruments and Special Tools

- * Servo gain adjuster (SZZP1017F or SZZP1094C-1)
- * Test discs
 1. Playability test disc (SZZP1054C)
 2. Uneven test disc (SZZP1056C)
 3. Black band test disc (SZZP1057C)
- * Normal disc
- * Dual-beam oscilloscope with bandwidth of 30MHz or better (with EXT. trigger and 1 : 1 probe).

- * Audio-frequency (AF) oscillator
- * Conversion connector (SZZP1032F)
- * Lead wire (for test points)
- * Allen wrench (M2.0) (SZZP1101C)
- * DC voltmeter



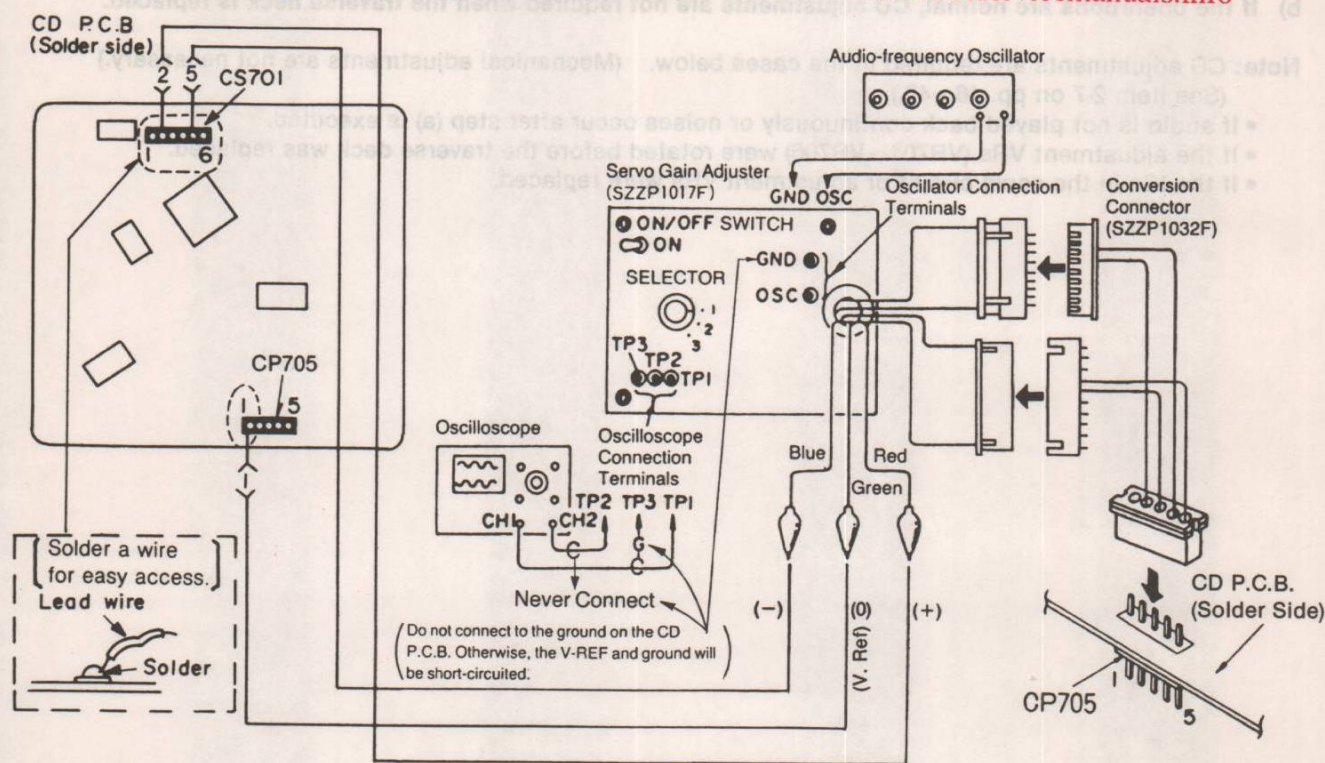
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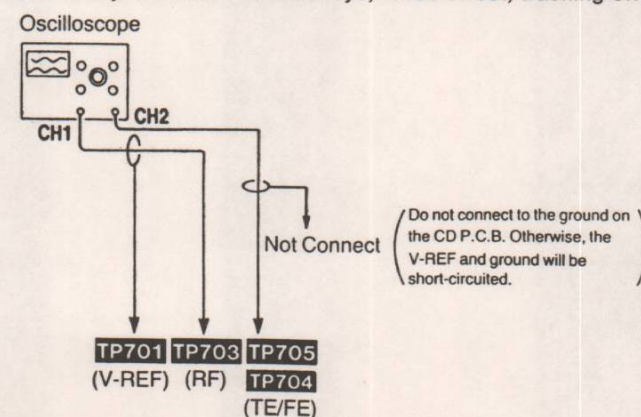
• CONNECTING THE SERVO GAIN ADJUSTER

(Tracking gain, focus gain and tracking balance adjustment)



• CONNECTING THE OSCILLOSCOPE

(Mechanical adjustment and adjustment of the best eye, focus offset, tracking offset and tracking balance)



CAUTION:

1. TP3 and GND terminal on the SZZP1017F and TP4, chassis of SZZP1017F are all same V-Ref potential.
2. During adjustment, never connect CH-2 probe's GND to any place for it may short Vref line.
(Connect CH-1 probe's GND to specified TP described in each section.)

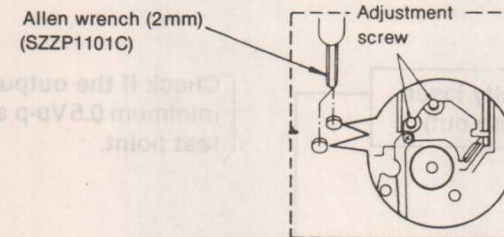
(1) MECHANICAL ADJUSTMENT

- When the traverse deck is replaced, making adjustments is not necessary. (The traverse deck ass'y is already adjusted.)
- Make adjustments to improve playability if the traverse deck has not been replaced.

1. Connect CH1 of the oscilloscope to TP703 (RF) and TP701 (V. Ref.) of the CD P.C.B.

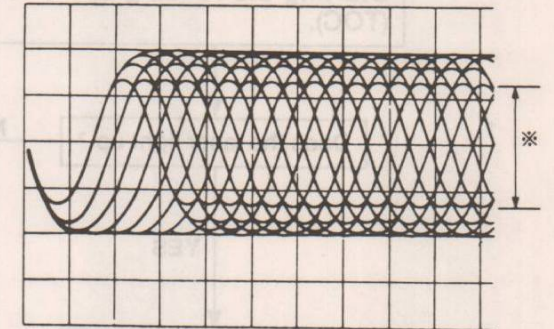
Oscilloscope setting: VOLT.....200mV
SWEEP.....0.2μsec
INPUT.....AC

2. Turn ON the power switch of the player and insert the test disc (SZZP1056C) and play Track No. 5.



Note: The mechanical adjustment screws have been locked with screw lock paint at the factory. They might be hard to turn.

3. Monitoring RF signal on the oscilloscope, adjust the two adjusting screws alternately with the 2mm Allen wrench (SZZP1101C) so that the vertical fluctuation of RF signal is minimized and the eye pattern is most stretched.
4. Turn OFF the power switch of the player.
5. After adjustment, apply screw lock paint (RZZ0L01) to the adjusting screws.



※ Most stretched eye pattern.

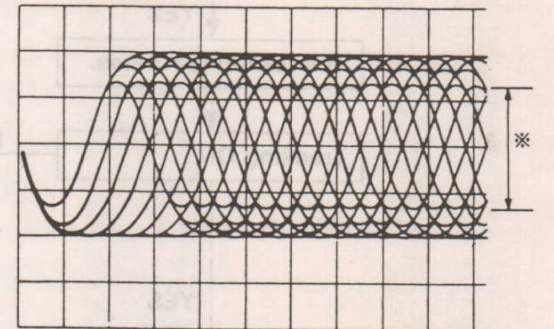
(2) BEST EYE (PD BALANCE) ADJUSTMENT

1. Connect the oscilloscope's CH. 1 probe across TP703 (+) and TP701 (-) on the CD P.C.B.

Oscilloscope setting:

VOLT..... 200 mV
SWEEP..... 0.2 μs.
Input coupling AC

2. Switch the player power ON, and play the 1 kHz (track1) on the test disc (SZZP1054C).
3. Adjust VR701 until the vertical fluctuation of RF signal is minimized and the eye pattern most stretched.



*Most stretched eye pattern.

(3) FOCUS GAIN ADJUSTMENT

1. Connect the servo gain adjuster to the player (see page 45).
2. Set the servo gain adjuster's gain switch to position "2" and the ON/OFF switch to ON.
3. Set up the AF oscillator output for 1 kHz, 150 mVp-p, and connect it across the OSC and GND terminals on the servo gain adjuster.
4. Connect oscilloscope's CH. 1 and CH. 2 probes to the servo gain adjuster's TP1 and TP2 terminals, respectively (CH. 1 probe (-) to TP3 Terminal).

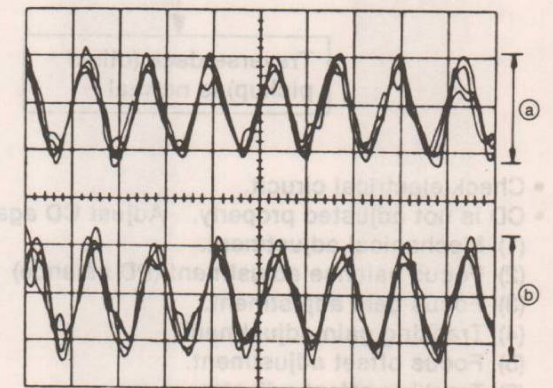
Oscilloscope setting:

VOLT 50 mV (both channels)
SWEEP 1 msec.
Input coupling AC

5. Play the test disc (SZZP1054C).
6. Set the servo gain adjuster's gain switch to position "3", and you will see a 1 kHz signal on the

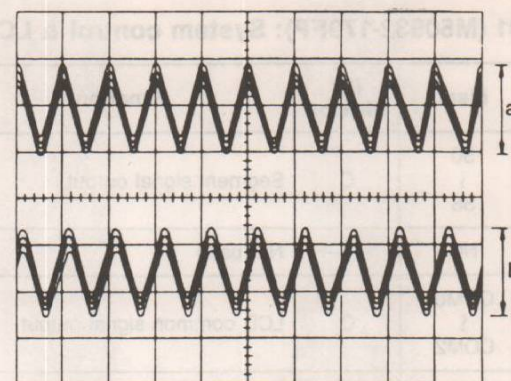
oscilloscope. Adjust VR704 until the signal amplitudes on both channels become identical to each other.

7. Set the gain switch back to position "2".



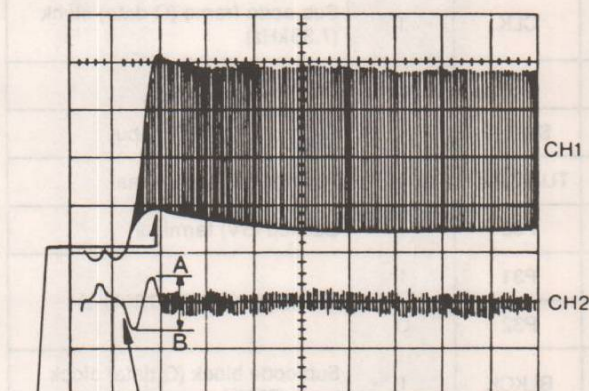
*Adjust VR704 until a equals b.

5. Set the gain switch back to position "2".



※ Adjust VR705 until a equals b.

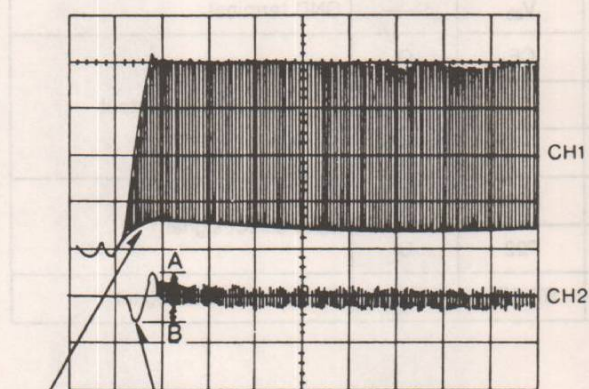
3. Trigger the oscilloscope's CH. 1 so that the following waveforms are observed. Adjust **VR703** until the dip in the RF signal envelope on CH. 1 is smooth and the signal amplitude on CH.2 is minimized, i.e. when amplitude (A) equals amplitude (B).



Smooth
envelope

Minimize the amplitude or make $\textcircled{A} = \textcircled{B}$.

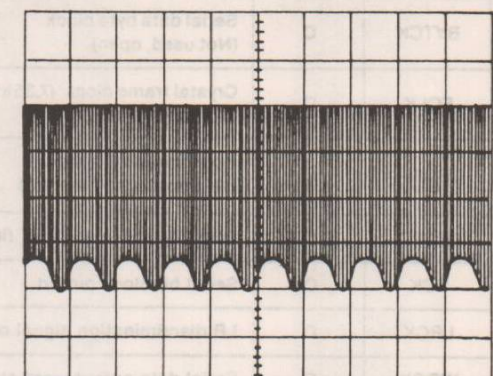
3. Trigger the oscilloscope's CH. 1 so that the following waveforms are observed. Adjust **VR706** until the dip in the RF signal envelope on CH. 1 is smooth and the signal amplitude on CH. 2 is minimized, i.e. when amplitude (A) equals amplitude (B).



Smooth
envelope

Minimize the amplitude or make (A) = (B).

4. Switch the player power **ON**, and play the test disc (SZZP1014F or SZZP1054C).



✖ This section of the waveform must be balanced.

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

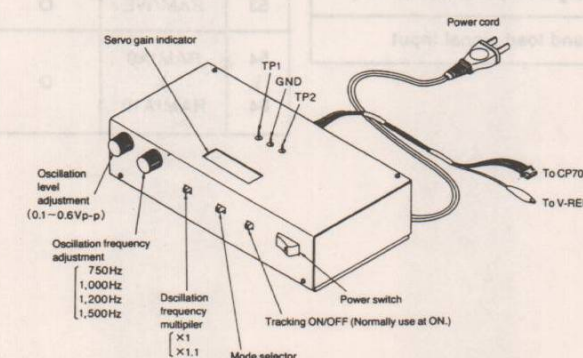
1. Play the 0.7mm black dot and the 0.7mm wedge on the defect test disc (SZPP1054C) and verify that no sound skip or noise occurs.
2. Play the middle tracks of the uneven test disc (SZPP1056C) and verify that no sound skip or noise occurs.

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

The following introduces the improved version of the current servo gain adjuster (SZZP1017F):

Part number: SZZP1094C-1

- (1) Contains all oscillation frequencies and output adjustments needed for focus servo gain, tracking servo gain, and tracking balance adjustment (requires no external oscillator).
- (2) Panel indicators indicate the best points of focus and tracking servo gains (no oscilloscope needed).
- (3) Internal power supply eliminates the need for power supply from the CD player.



FUNCTION OF IC TERMINALS

• IC704 (MN6625): Digital signal processor

Pin No.	Mark	I/O Division	Function
1	BYTCK	O	Serial data byte clock (Not used, open)
2	FCLK	O	Crystal frame clock (7.35 kHz) (Not used, open)
3	DEMPH	O	De-emphasis ON signal (de-emphasis ON at "H")
4	SRDATA	O	Serial data output (MSB first)
5	SCK	O	Serial bit clock output
6	LRCK	O	LR discrimination signal output
7	WDCK	O	Serial data output word clock
8	LDG	O	L channel deglitch signal (Not used, open)
9	RDG	O	R channel deglitch signal (Not used, open)
10	IPFLAG	O	Interpolation flag (interpolation at "H")
11	FLAG	O	Error flag terminal
12	XCK	O	Clock (16.9344 MHz) output (Not used, open)
13	TEST	I	Test mode selection (Not used, connected to power supply.)
14	TX	O	Digital signal output (Not used, open)
15	SLEEP	I	Mode selector ("L": normal, "H": SLEEP mode) (Not used, connected to GND)
16	CSEL	I	Test terminal ("L": normal) (Not used, connected to GND)
17	X1	I	Clock input (16.9344 MHz)
18	X2	O	Clock output (16.9344 MHz) (Not used, open)
19	VSS	—	GND terminal
20	BLKCK	O	Sub-code block (Q data) clock (75 Hz)
21	CLDCK	O	Sub-code frame (Q data) clock (7.35 kHz)
22	SUBQ	O	Sub-code (Q data) output
23	RST	I	Reset signal input (reset at "L")
24	MLD	I	Command load signal input

Pin No.	Mark	I/O Division	Function
25	MCLK	I	Command clock signal input
26	MDATA	I	Command data input
27	DMUTE	I	Muting control
28	TRON	I	Tracking servo ON signal (tracking servo ON at "L")
29	STAT	O	Processing condition (CRC, CUE, CLVS, TT STOP, FCLV)
30	SUBC	O	Sub-code serial output data (Not used, open)
31	SBCK	I	Clock for sub-code serial output (Not used, open)
32	SMCK	O	Clock output (4.2336 MHz)
33	VDD	I	Power supply
34	MEMP	I	Emphasis signal input (Not used, open)
35	FG	I	Spindle motor FG signal input (Not used, open)
36	PC	O	Spindle motor ON signal (ON at "L")
37	EC	O	Spindle motor drive signal
38	RESY	O	Resynchronizing signal (Not used, open)
39	DO	I	Drop-out signal (Drop-out at "H")
40	SRF	I	EFM signal input (DSL)
41	EFM	I	EFM signal input (PLL)
42	PCK	I	PLL extract clock input (4.3218 MHz)
43	FPC	O	PLL frequency comparison signal
44 51	D7 D0	I/O	16K RAM data input/output
52	RAM/OE	O	16K RAM $\overline{OE}$ signal
53	RAM/WE	O	16K RAM $\overline{WE}$ signal
54 64	RAM/A0 RAM/A10	O	16K RAM address signal (RAMA0: LSB, RAMA10: MSB)

• IC801 (M50932-179FP): System control & LCD drive

Pin No.	Mark	I/O Division	Function
1 9	S0 S8	O	Segment signal output
10	NC	—	Not used
11 13	COM0 COM2	O	LCD common signal output
14 16	VL1 VL3	I	Power input terminals for LCD driver.
17	V _{CC}	—	+5V input terminal
18	CNTR	I/O	Time operate input/output signal
19	PWR CTRL	I/O	Power control signal
20	CLK	I	Sub code frame (Q data) clock (7.35 kHz)
21	NC	—	Not used
22	SUB Q	I	Sub code (Q data) input
23	TUNE IND	I	Tuning indication signal
24	P32	I	Backup (5V) terminal
25	P31	I	Clock terminal (32.768 kHz)
26	P32	O	
27	BLKCK	I	Sub-code block (Q data) clock input (75 Hz)
28	CNV _{SS}	—	Connected V _{SS} terminal
29	RESET	I	Reset signal input
30	X _{IN}	I	Clock terminal (4 MHz)
31	X _{OUT}	O	
32	V _{SS}	—	GND terminal
33	CE	O	PLL control signal output
34	DI	O	
35	CL	O	Input select signal
36	P24	O	
37	P22	O	Stereo indication signal
38	ST IND	I	

Pin No.	Mark	I/O Division	Function
39	POWER	—	Power input terminal
40	STATAS	I	Processing status input from signal processor LSI
41	AF MUTE	O	AF mute command signal
42	TR REV	O	Traverse "Reverse" command signal
43	TR FWD	O	Traverse "Forward" command signal
44	CNT 4	O	Optical servo IC control signal (Kick direction [Reverse] command)
45	CNT 3	O	Optical servo IC control signal (Kick direction [Forward] command)
46	CNT 2	O	Optical servo IC control signal (Tracking servo)
47	CNT 1	O	Optical servo IC control signal (Focus servo)
48	FLOCK	I	Optical servo condition (Focus) input
49	SENSE	I	Optical servo condition (Track cross) input
50	MLD	O	Command load output
51	MDATA	O	Command data output
52	MCLK	O	Command clock output
53 56	P ₀₀ P ₀₃	I	Key scan data signal input (4-bit)
57 64	P ₄₀ P ₄₇	I	Key scan data signal input (8-bit)
65 72	S16 S23	O	Segment signal output
73	V _{SS}	—	GND terminal
74 80	S ₉ S15	O	Segment signal output

REPLACEMENT PARTS LIST

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Parts without these indications can be used for all areas.

- * $\square$ Indicates in Remarks columns parts that are supplied by MESA.

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

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

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT (S)		Q301	2SC1740SLNRT	TRANSISTOR	
				Q304	RVDTA143XST	TRANSISTOR	
				Q305	2SC1740SQT	TRANSISTOR	
IC1	RVITA7358P	IC, FM FRONT END		Q306	RVDTA143XST	TRANSISTOR	
IC2	RVIBA4236L	IC, FM/AM IF AMP		Q307	2SC1740SQT	TRANSISTOR	
IC3	RVIBA1332L	IC, FM MPX		Q308	2SC1740SRT	TRANSISTOR	
IC4	LM7001	IC, PLL FREQUENCY		Q309	2SC1740SSTA	TRANSISTOR	
IC301	BA15218N-DX	IC, OP. AMP		Q310	2SC2001L1TA	TRANSISTOR	
IC302	BA3310N	IC, REC AMP		Q311	2SC2001K1TA	TRANSISTOR	
IC303	BA7755	IC, R/P SELECT		Q312	2SC1740SRT	TRANSISTOR	
IC304, 305	BU4066B	IC, INPUT SELECT		Q314	RVDTTC143XST	TRANSISTOR	
IC306	TC9312AN-082	IC, MECHA. CONT.		Q320	2SB621RTA	TRANSISTOR	
IC307	AN7134N	IC, POWER AMP		Q321	RVDTTC143XST	TRANSISTOR	
IC308	BA3920	IC, POWER SUPPLY		Q322	2SB621RTA	TRANSISTOR	
IC309	S81250HGT	IC, REGULATOR		Q323	RVDTTC143XST	TRANSISTOR	
IC310	BA6137	IC, ATLS	$\square$	Q324-327	RVDTTA114EST	TRANSISTOR	
IC501	RVIBA3822LS	IC, G. EQUALIZER		Q328	RVDTTC143XST	TRANSISTOR	
IC551	BA6218	IC, MOTOR SW		Q329	2SB1311Q	TRANSISTOR	
IC801	M50932-179FP	IC, SYSTEM CONT./LCD		Q330	2SC1740SRT	TRANSISTOR	
IC802	S8054HN-T	IC, RESET SIGNAL		Q351	RVDTTA114EST	TRANSISTOR	
IC803	M50253P	IC, SYSTEM CONT.		Q352	RVDTTC143XST	TRANSISTOR	
IC971	DN6851A	IC, HALL		Q353	2SJ40CTA	TRANSISTOR	
		TRANSISTOR (S)		Q401, 402	RVDTTC143XST	TRANSISTOR	
				Q550, 551	2SC1740SRT	TRANSISTOR	
				Q552	RVDTTA114TST	TRANSISTOR	
Q1	2SC1047CTA	TRANSISTOR		Q553	RVDTTC143XST	TRANSISTOR	
Q2	2SC829BTA	TRANSISTOR		Q555	RVDTTA114TST	TRANSISTOR	
Q3-6	2SA720S	TRANSISTOR		Q556	RVDTTC143XST	TRANSISTOR	
Q7	2SC829BTA	TRANSISTOR		Q801-803	RVDTTA114EST	TRANSISTOR	
Q8-10	RVDTTA143XST	TRANSISTOR		Q804	RVDTTC114EST	TRANSISTOR	
Q11	2SC1740SSTA	TRANSISTOR		Q805, 806	RVDTTC114TST	TRANSISTOR	
Q12, 13	2SC1684HS	TRANSISTOR		Q807	2SC1740SSTA	TRANSISTOR	
Q14, 15	2SC1740SLNRT	TRANSISTOR		Q808	RVDTTA114EST	TRANSISTOR	
Q16, 17	2SC1684RTA	TRANSISTOR		Q809	2SC1740SSTA	TRANSISTOR	
Q101	2SC2001L1TA	TRANSISTOR		Q810	RVDTTA114EST	TRANSISTOR	
Q102, 103	2SC1740SSTA	TRANSISTOR		Q811	2SC1740SSTA	TRANSISTOR	
Q104	RVDTTC143XST	TRANSISTOR		Q812, 813	RVDTTC114TST	TRANSISTOR	
Q105	2SJ40CTA	TRANSISTOR		Q815	2SC1740SSTA	TRANSISTOR	
Q106	RVDTTC143XST	TRANSISTOR		Q816, 817	RVDTTC114TST	TRANSISTOR	
Q151, 152	2SC1740SLNRT	TRANSISTOR					
Q201	2SC2001L1TA	TRANSISTOR				DIODE (S)	
Q202, 203	2SC1740SSTA	TRANSISTOR					
Q204	RVDTTC143XST	TRANSISTOR		D1, 2	1SV147T4MATU	DIODE	
Q205	2SJ40CTA	TRANSISTOR		D3	RVD1SS133TA	DIODE	
Q206	RVDTTC143XST	TRANSISTOR		D4-7	RVD5VC321	DIODE	
Q251, 252	2SC1740SLNRT	TRANSISTOR		D8, 9	RVD1SS133TA	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
D10	RVDMTZ5R6BTA	DIODE		L6	RL01B15-M	COIL, LW OSC	$\square$
D11-13	RVD1SS133TA	DIODE		L7	RL09B18-M	COIL, DC-DC CONV	
D14	RVDMTZ11BTA	DIODE		L8	RLQZP221KT-Y	COIL, RF CHOKE	
D15, 16	RVD1SS133TA	DIODE		L9	RLQZP101KT-Y	COIL, RF CHOKE	
D101	RVD1SS133TA	DIODE		L10	RLQZP221KT-Y	COIL, RF CHOKE	
D103	RVD1SS133TA	DIODE		L11	RLQZP2R2KT-Y	COIL, RF CHOKE	
D201	RVD1SS133TA	DIODE		L101, 201	RLQZB272KT-D	COIL, RF CHOKE	$\square$
D203	RVD1SS133TA	DIODE		L301	RL08R7-T	COIL, BIAS OSC	$\square$
D301	RVD1SS133TA	DIODE		L302, 303	RLQZB470KT-D	COIL, RF CHOKE	
D302	RVDMTZ7R5BTA	DIODE		L304, 305	RLQZP100KT-Y	COIL, RF CHOKE	
D303-312	RVD1SS133TA	DIODE		L306, 307	RLQZB220KT-D	COIL, RF CHOKE	Δ
D313	RVDMTZ10BTA	DIODE		L501, 502	RLQV472K-Z	COIL, RF CHOKE	
D316	MA723TA	DIODE		L600	RLQY30S1W-0	COIL, RF CHOKE	(E)
D318	RVD1SS133TA	DIODE		L801-808	RLQZP2R2KT-Y	COIL, RF CHOKE	
D320	RVDMTZ6R8BTA	DIODE				TRANSFORMER (S)	
D321-324	RVDP300DLF	DIODE					
D401, 402	SLR33MC160	LED (GREEN), REV. FWD	$\square$	T1	RLI4B153-M	TRANSFORMER, FM IFT	
D403	SLR33VC160	LED (RED), REC PAUSE	$\square$	T2	RLI2B468-M	TRANSFORMER, AM IFT	$\square$
D404-409	RVD1SS133TA	DIODE		T3	RLI4B153-M	TRANSFORMER, FM IFT	
D551	RVD1SS133TA	DIODE		T301	RLT5L5G4B-X	TRANSFORMER, POWER	(E, EG) Δ $\square$
D552	SLT25VR124	L. E. D	$\square$	T301	RLT5L5A4A-X	TRANSFORMER, POWER	(EB) Δ $\square$
D554	SLT25VR124	L. E. D	$\square$			TRIMMER	
D555	RVD1SS133TA	DIODE					
D801-803	RVD1SS133TA	DIODE		CT1	ECRLA010A53R	TRIMMER	
D804	SL25VR70F155	L. E. D	$\square$	CT2	RCV10AF1T-S	TRIMMER	
D805-810	RVD1SS133TA	DIODE		CT3	ECRLA030E53R	TRIMMER	
D812-816	RVD1SS133TA	DIODE				COMPONENT COMBINATION (S)	
D818-824	RVD1SS133TA	DIODE					
D825	SLB25VR124	L. E. D	$\square$				
D826	SL25VR70F155	LED (RED), POWER/BATT	$\square$				
D827, 828	RVD1SS133TA	DIODE		Z1	RXABPMB6AT	B. P. F., FM	
D830	RVD1SS133TA	DIODE		Z801	RSL5019-L	LCD	$\square$
D831	RVDMTZ6R8BTA	DIODE		Z802	A1QH3029HO	COMPONENT COMBINATION	
D971	RVD1SS133TA	DIODE					
		I. C. PROTECTOR				FILTER (S)	
IP301	RAHICPN15TA	IC PROTECTOR		CF1	RLFFETWNA01L	CERAMIC FILTER, FM	
IP302	RAHICPN10TA	IC PROTECTOR		CF2	RVFSF2459HL3	CERAMIC FILTER, AM	$\square$
IP303, 304	RAHICPN5TA	IC PROTECTOR				OSCILLATOR (S)	
		VARIABLE RESISTOR (S)					
VR1	EVNDXAA00B14	V. R. FM MPX VCO		X1	SVQ49U722-S	OSCILLATOR, 7.2MHz	
VR501	EWCO7A027C54	V. R. VOLUME	$\square$	X801	RSXD32K7S01	OSCILLATOR, 32.768KHz	$\square$
VR502	EWAGU3C14G15	V. R. BALANCE	$\square$	X802	RVBCSA4R0MGT	OSCILLATOR, 4MHz	
VR503-507	EWAGQ6C14G54	V. R. GRAPHIC EQ.	$\square$			FUSE (S)	
		COIL (S)		F301	XBA2C31TB0K	FUSE (125V, 4A)	Δ $\square$
						SWITCH (ES)	
L4	RLF6W14-0	COIL, F. ANT	$\square$				
L5	RL02B125-M	COIL, AM. OSC	$\square$				

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
S301	RSS2A56ZA-H	SW, BEAT PROOF	[M]	J600	RJS1A4702	ANTENNA JACK	(E) [M]
S302	RJJ1A52C-H	SW, AC IN/W. J303	△				
S303	ESB6483	SW, XBS	[M]			CONNECTOR AND SOCKET	
S401	RSS3A18YA-H	SW, REVERSE MODE					
S402	EVQ21405R	SW, REC PAUSE		CP1	RJP2G18ZA	CONNECTOR (2P)	(E)
S403	EVQ21405R	SW, FWD PLAY		CP301	RJP5G18ZA	CONNECTOR (5P)	
S404	EVQ21405R	SW, REV PLAY		CP600	RJP2G18ZA	CONNECTOR (2P)	(E)
S405	EVQ21405R	SW, FAST (▶▶▶)		CS1	RJS7T4ZA	SOCKET (7P)	
S406	EVQ21405R	SW, FAST (◀◀◀)		CS301	RJS2T6ZA	SOCKET (2P)	[M]
S407	EVQ21405R	SW, STOP		CS302	RJS9T7ZA	SOCKET (9P)	
S801	EVQ21405R	SW, TUNER/BAND		CS303	RJS9T4ZA	SOCKET (9P)	
S802	EVQ21405R	SW, CD		CS304	RJS4T6ZA	SOCKET (4P)	
S803	EVQ21405R	SW, "1"		CS305	RJS9T4ZA	SOCKET (9P)	
S804	EVQ21405R	SW, "7"		CS306	SJT30243-V	CONNECTOR (2P)	
S805	EVQ21405R	SW, AUX		CS307	RJS2T6ZA	SOCKET (2P)	[M]
S806	EVQ21405R	SW, TUNING(-)		CS801	RJS11T4ZA	SOCKET (11P)	
S807	EVQ21405R	SW, REPEAT		CS802	RJS7T4ZA	SOCKET (7P)	
S808	EVQ21405R	SW, ATLS		CS803	RJS12T4ZA	SOCKET (12P)	
S809	EVQ21405R	SW, "2"					
S810	EVQ21405R	SW, "8"					
S811	EVQ21405R	SW, TAPE					
S812	EVQ21405R	SW, TUNING(+)					
S813	EVQ21405R	SW, CANCEL					
S814	EVQ21405R	SW, "3"					
S815	EVQ21405R	SW, "9"					
S816	EVQ21405R	SW, OPERATION					
S817	EVQ21405R	SW, PLAY/STOP					
S818	EVQ21405R	SW, "4"					
S819	EVQ21405R	SW, "10"					
S820	EVQ21405R	SW, PAUSE/E. P					
S821	EVQ21405R	SW, "5"					
S822	EVQ21405R	SW, PROGRAM					
S823	EVQ21405R	SW, SKIP/SEARCH (▶▶/▶▶▶)					
S824	EVQ21405R	SW, "6" (◀◀◀/◀◀◀)					
S825	EVQ21405R	SW, "+10"					
S826	EVQ21405R	SW, SKIP/SEARCH					
S827	RSS3A24ZA-H	SW, FM MODE/B. P					
S828	RSH1A64ZA-U	SW, OPEN/CLOSE					
S829	RSH1A64ZA-U	SW, LASER STOP					
S971	RSH1A89ZA-U	SW, MODE					
S972	RSH1A90YA-U	SW, CASSETTE HALF DELECT					
S973	RSH1A90YA-U	SW, REV REC INHIBIT					
S974	RSH1A90YA-U	SW, FWD REC INHIBIT					
S975	RSH1A90YA-U	SW, ATS/Cr02					
		JACK(S)					
J301	RJJ1D25ZA-C	MIC JACK					
J302	RJJD7S2YA-C	H. P JACK					
J303	RJJ1A52C-H	AC IN JACK/W. S302	△				
J304	RJF1099YA	AUX IN JACK					
J305	RJJB32D-C	DC IN JACK					

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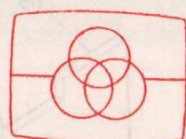
Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
1	EAS16P431A-G	SPEAKER	[M]	48	XTV26+8G	SCREW	
2	RFKGD5660PAK	SP FRONT CAB. ASS' Y (R)	[M]	49	RMC1235ZAA	SHIELD PLATE (UP)	[M]
2A	RAF25E4M03-T	TWEETER	[M]	50	RJB0350D	P. C. B. SWITCH	[M]
3	RHG2152ZA	CORD BUSHING	[M]	51	RWJ1107170QQ	FLAT CABLE (7P)	[M]
4	RJE297YA	SP CORD	[M]	52	RBD567XA-0	SLIDE VR KNOB	[M]
5	RKF971YD-0	SP BACK CABINET (R)	[M]	53	RBD572ZA-0	SLIDE KNOB	[M]
6	XTV3+10G	SCREW		54	RGV0043-K	FM MODE KNOB	[M]
7	XTV3+20GFY	SCREW		55	RGW0067A-K	VR KNOB	[M]
8	RFKGD5660PBK	SP FRONT CAB. ASS' Y (L)	[M]	56	RKK317YA-0	BATTERY COVER	[M]
8A	RAF25E4M03-T	TWEETER	[M]	57	RMC1257ZA	TRANS SHIELD	[M]
9	RKF971ZD-0	SP BACK CABINET (L)	[M]	58	RSC0094	TRANS SHIELD PLATE	[M]
10	RHR193ZA	CONNECTOR (6P)		59	RSC0097	TRANS SHIELD	[M]
11	RHR194ZA	CONNECTOR (7P)		60	XTN3+10CFZ	SCREW	
12	RHR196ZA	CONNECTOR (9P)		61	XTN3+20CFZ	SCREW	
13	RHR198ZA	CONNECTOR (11P)		62	XTV3+10G	SCREW	
14	RHR199ZA	CONNECTOR (12P)		63	XTV3+12G-M	SCREW	
15	RJC511ZBS	BATTERY SPRING	[M]	64	XTV3+20G	SCREW	
16	RJC70031YA	BATTERY SPRING	[M]	65	XWT3	WASHER	
17	RJF28ZA	FUSE HOLDER	△	66	RGK0235A-H	10-KEY ORNAMENT	[M]
18	RHR3401ZB	SOUND ABSORBING MATERIAL	[M]	68	RGU0338A-H	FUNCTION BUTTON	[M]
19	RKE651ZA-0	HANGER	[M]	69	RGU0341-K	C-MECH EJECT BUTTON	[M]
21	RJF1098ZA-H	SP TERMINAL	[M]	70	RML0155	EJECT LEVER ARM	[M]
22	RWJ0103080KK	FLAT CABLE (3P)	[M]	71	RFKXDS660EC	FRONT CABINET ASS' Y	[M]
23	RMV0039	HEAT SINK	[M]	72	RDG5782YC	GEAR	[M]
24	RSC0099	SHIELD PLATE	[M]	73	RW170YAA	OPEN SPRING	[M]
25	RWJ0206210QQ	FLAT CABLE (6P)	[M]	74	RFKXDS660PK	CASSETTE HOLDER ASS' Y	[M]
26	RWJ0207110QQ	FLAT CABLE (7P)	[M]	75	RFKLD5660PAK	CASSETTE LID ASS' Y	[M]
27	RWJ0209090QQ	FLAT CABLE (9P)	[M]	76	RHG782ZA	RUBBER FOR HANDLE	[M]
28	RWJ1111110QQ	FLAT CABLE (11P)	[M]	77	RFKXDS660EK	REAR CABINET ASS' Y	(E) [M]
29	RWJ1112110QQ	FLAT CABLE (12P)	[M]	77	RFKXDS660EB	REAR CABINET ASS' Y	(EB) [M]
30	RWJ1803250KK	FLAT CABLE (3P)	[M]	77	RFKXDS660EG	REAR CABINET ASS' Y	(EG) [M]
31	RWJ1804150KQ	FLAT CABLE (4P)	[M]	77A	RMA0283	TERMINAL	[M]
32	XTW3+10F	SCREW		77B	RGNO216A-K	NAME PLATE	(EB) [M]
33	XTW3+8F	SCREW		77B	RGNO216C-K	NAME PLATE	(EG) [M]
34	RGU0339A-K	CD 10KEY BUTTON	[M]	77B	RGNO216B-K	NAME PLATE	(E) [M]
35	RHR197ZA	CONNECTOR (10P)		78	RFKXDS660PAK	HANDLE ASS' Y	[M]
36	RHR3399ZA	LEAF SWITCH COVER	[M]	79	XEARR175FA-Y	TELESCOPIC ANTENNA	
40	RMC1239ZBA	IC SHIELD PLATE	[M]	80	XYN3+F12FY	SCREW	
41	RSC0093	SHIELD PLATE (REAR)	[M]	81	RBC1412ZA-0	CD EJECT BUTTON	[M]
42	RSC0098	SHIELD PLATE	[M]	82	RDG5782YC	GEAR	[M]
43	RSC0100	SHIELD PLATE (UP)	[M]	83	RKE653ZA-0	TOP CABINET	[M]
44	RJB0349D	P. C. B. BATTERY	(E) [M]	84	RUL1136ZA	CD EJECT LEVER	[M]
44	RJB0349E	P. C. B. BATTERY	(EG, EB) [M]	85	RUS780ZA	CD BUTTON SPRING	[M]
45	RWJ0209200QQ	FLAT CABLE (9P)	[M]	86	XTW3+10P	SCREW	
46	RWJ1110090QQ	FLAT CABLE (10P)	[M]	87	RGX1807ZA-0	CD ORNAMENT	[M]
47	RWJ1112090QQ	FLAT CABLE (12P)		88	RHM245ZA	MAGNET	

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
89	RME502ZB	FIXTURE	[M]	221	RFM173ZA	DC MOTOR	
90	RJW217ZA	OPEN SPRING	[M]	222	IUE0015ZA	PLUNGER	
91	RFKNS620PBK	CLAMPER ASS' Y	[M]	223	RUB428ZE	SHAFT	
92	RFKLS660PBK	CD LID ASS' Y	[M]	224	RUL1030ZC	ANGLE	
99	RMS0123	SHAFT	[M]	225	RMD5014ZC	ANGLE	
100	RMK0051	CHASSIS	[M]	226	RDG5927ZG	GEAR	
102	RWJ0209090Q	FLAT CABLE (9P)	[M]	227	1DW0037ZB	FLYWHEEL (F)	
103	RUL9010ZA	REINFORCE ANGLE	[M]	227A	RNW139ZA	WASHER	
104	SODD101-3Z	TRAVERSE ASS' Y		228	1DW0038ZB	FLYWHEEL (R)	
104A	SHGD112	RUBBER		228A	RNW138Z	WASHER	
104B	SHGD113-1	RUBBER		229	1DG0006ZA	REEL TABLE GEAR	
105	RUA867ZB	HOLDER		230	RUB513ZD	ARM	
106	RMB0017-2	SPRING	[M]	231	1UB0091ZA	LEVER	
107	XQN17+C3	SCREW		231A	RJW146ZA	SPRING	
108	RDG5953ZC	GEAR		232	1DR0011ZA	MAIN PULLEY	
109	RDG5954ZA	GEAR		233	RDV90ZB	BELT	
110	RMR0261	LED HOLDER	[M]	234	RDG5769ZA	REEL TABLE GEAR	
111	RJC93006	SPRING	[M]	235	RJQ111ZB	SPRING	
112	RGU0271	XBS KNOB	[M]	236	RJW145ZA	SPRING	
113	RUD129XA	SPRING		237	1UB0090ZA	ROD	
114	RFM156ZA	VOLUME MOTOR ASS' Y		237A	RUB512ZB	ROD	
115	REX0231	LEAD WIRE ASS' Y	(E) [M]	238	RDG5773ZB	GEAR	
116	XTB26+20G	SCREW	(E) [M]	239	RJQ112ZA	SPRING	
117	REX0230	LEAF SW WIRE	[M]	240	RUS609ZC	TAPE PRESSURE SPRING	
				241	RUB514ZC	LEVER	
		MECHANISM PARTS		242	RJW147ZA	SPRING	
				243	RUB515ZA	LEVER	
		CASSETTE DECK		244	RUB509ZA	LEVER	
201	RXQ0007	HEAD BLOCK (REC./PLAYBACK)		245	RDV100ZA	CAPSTAN BELT	
202	RJA793ZE	HEAD BASE		249	RHG3032ZA	RUBBER CUSHION	
203	RZLAR300A	ROD		250	RNL180ZB	DAMPER ARM	
203A	RJW143ZA	SPRING		251	REX0174-1	LEAD WIRE ASS' Y	[M]
204	1UB0089ZA	ARM		261	XTW2+6L	SCREW	
204A	RJW148ZA	SPRING		262	XTW2+8L	SCREW	
205	1DM0018ZA	REEL TABLE (R)		263	XTN26+7J	SCREW	
206	1DM0017ZA	REEL TABLE (F)		264	RHE5203ZA	SCREW	
207	RML0069-1	LEVER		265	XTW2+8S	SCREW	
208	RDG5772ZC	GEAR		266	XYC2+JF16	SCREW	
209	RUB508ZB	BRAKE ROD		267	RHD26002	SCREW	
210	RUB506ZB	LEVER		268	RJS9T7ZA	CONNECTOR (9P)	
211	1UB0088ZA	ARM(R) ASS' Y, PINCH ROLLER					
211A	RJW141ZA	SPRING				PACKING MATERIAL	
212	1UB0087ZA	ARM(F) ASS' Y, PINCH ROLLER					
212A	RJW140ZB	SPRING		P1	RPH3SZA	SHEET	[M]
213	RUB507ZD	EJECT ROD (R)		P2	RPK0170	GIFT BOX	[M]
214	RNL12ZD	DAMPER ARM		P3	RPN0292	PAD	[M]
215	RUB503ZD	MAIN LEVER					
216	RFKRAA0320	CHASSIS				ACCESSORIES	
217	RJW142ZA	SPRING					
218	RUD105ZA	SPRING		A1	RFKXSDS660EK	INST. MANUAL	(E) [M]
219	RJW144ZA	SPRING		A1	RQT0590-G	INST. MANUAL	(EB, EG) [M]
220	RJW139ZA	SPRING		A2	RJA20ZD-K	AC CORD	△ (E, EG)

Ref. No.	Part No.	Part Name & Description	Remarks
A2	RJA86ZB-K	AC CORD	△ (EB)
A3	RAK-RX303EM	REMOTE CONTROL ASS'Y	IM
A4	RK0008-KE	BATTERY COVER	IM
		TRAVERSE UNIT	
		INTEGRATED CIRCUITS	
IC701	AN8373SE2	IC, CD SERVO SYSTEM	
IC702	AN8374SE2	IC, PWM DRIVE/PLL	
IC703	AN8377N	IC, MOTOR DRIVE	
IC704	MN6625	IC, SIGNAL PROCESS	
IC705	LC3517BMLTP	IC, DE INTERLEAVE	
IC706	TA8410P	IC, MOTOR DRIVE	
IC707	SM5807ESE2	IC, DIGITAL FILTER	
IC708	UPD6376GSE2	IC, D/A CONVERTER	
		TRANSISTORS	
Q701	2SA1309STA	TRANSISTOR	
Q703	UN4110TA	TRANSISTOR	
Q704, 705	UN4216TA	TRANSISTOR	
		DIODES	
D707, 708	MA165TA	DIODE	
		VARIABLE RESISTORS	
VR701	EVNDXAA00B14	V. R, BEST EYE ADJ.	
VR702	EVNDXAA00B24	V. R, TRACKING BAL. ADJ.	
VR703	EVNDXAA00B14	V. R, FOCUS OFFSET ADJ.	
VR704	EVNDXAA00B14	V. R, FOCUS GAIN ADJ.	
VR705	EVNDXAA00B14	V. R, TRACKING GAIN ADJ.	
VR706	EVNDXAA00B14	V. R, TRACKING OFFSET ADJ.	
		OSCILLATOR	
X701	RSXZ16M9M01T	OSCILLATOR	
		SWITCH	
S701	SSH5-E	SW, REST	
		CONNECTOR AND SOCKET	
CP701-703	RJP2G18ZA	PLUG (2P)	
CP704	RJP2G17ZA	PLUG (2P)	
CP705	RJP5G35ZA	PLUG (5P)	
CS701	RJS6T7ZA	SOCKET (6P)	
CS702	RJS12T7YA	SOCKET (12P)	
CS703	RJS10T7ZA	SOCKET (10P)	
CS705	RJS16Q11ZA	SOCKET (16P)	

Ref. No.	Part No.	Part Name & Description	Remarks
		RESISTORS	
R701	ERDS2TJ472T	C. RESISTOR 1/4W 4.7K	
R702	ERDS2TJ103T	C. RESISTOR 1/4W 10K	
R705	ERDS2TJ103T	C. RESISTOR 1/4W 10K	
R706	ERDS2TJ823T	C. RESISTOR 1/4W 82K	
R707	ERDS2TJ123T	C. RESISTOR 1/4W 12K	
R708	ERDS2TJ683T	C. RESISTOR 1/4W 68K	
R710	ERDS2TJ333T	C. RESISTOR 1/4W 33K	
R711	ERDS2TJ105T	C. RESISTOR 1/4W 1M	
R712, 713	ERDS2TJ102T	C. RESISTOR 1/4W 1K	
R715	ERDS2TJ222T	C. RESISTOR 1/4W 2.2K	
R716	ERDS2TJ102T	C. RESISTOR 1/4W 1K	
R717	ERDS2TJ104T	C. RESISTOR 1/4W 100K	
R720	ERDS2TJ120T	C. RESISTOR 1/4W 12	
R721	ERDS2TJ471T	C. RESISTOR 1/4W 470	
R722	ERDS2TJ222T	C. RESISTOR 1/4W 2.2K	
R723	ERDS2TJ682T	C. RESISTOR 1/4W 6.8K	
R725	ERDS2TJ103T	C. RESISTOR 1/4W 10K	
R726	ERDS2TJ562T	C. RESISTOR 1/4W 5.6K	
R727	ERDS2TJ332T	C. RESISTOR 1/4W 3.3K	
R728	ERDS2TJ682T	C. RESISTOR 1/4W 6.8K	
R732	ERDS2TJ562T	C. RESISTOR 1/4W 5.6K	
R733	ERDS2TJ473T	C. RESISTOR 1/4W 47K	
R735	ERDS2TJ392T	C. RESISTOR 1/4W 3.9K	
R736	ERDS2TJ472T	C. RESISTOR 1/4W 4.7K	
R737	ERDS2TJ102T	C. RESISTOR 1/4W 1K	
R738	ERDS2TJ104T	C. RESISTOR 1/4W 100K	
R740	ERDS2TJ471T	C. RESISTOR 1/4W 470	
R741	ERDS2TJ102T	C. RESISTOR 1/4W 1K	
R742	ERDS2TJ104T	C. RESISTOR 1/4W 100K	
R743	ERDS2TJ471T	C. RESISTOR 1/4W 470	
R745	ERDS2TJ470T	C. RESISTOR 1/4W 47	
R746	ERDS2TJ223T	C. RESISTOR 1/4W 22K	
R748	ERDS2TJ222T	C. RESISTOR 1/4W 2.2K	
R749	ERDS2TJ224T	C. RESISTOR 1/4W 220K	
R750-752	ERDS2TJ562T	C. RESISTOR 1/4W 5.6K	
R755	ERDS2TJ223T	C. RESISTOR 1/4W 22K	
R760	ERDS2TJ562T	C. RESISTOR 1/4W 5.6K	
		CAPACITORS	
C701	ECEA0JU471B	E. CAPACITOR 6.3V 470	
C702	ECEA1AU221B	E. CAPACITOR 10V 220	
C703, 704	ECFR1C104MR	. CAPACITOR 16V 0.1	
C705	ECEA1CN100SB	E. CAPACITOR 16V 10	
C706	ECFR1C104MR	. CAPACITOR 16V 0.1	
C707	ECEA0JU101B	E. CAPACITOR 6.3V 100	
C708	ECBT1H681KB5	. CAPACITOR 50V 680P	
C710	ECEA1HU010B	E. CAPACITOR 50V 1	
C711	ECBT1H390J5	. CAPACITOR 50V 39P	

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MECHANISM PARTS LOCATION (See parts list on page 55.)**(TOP VIEW)****(BOTTOM VIEW)****SPRING LOCATION**Free service manuals
Gratis schema's

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Free service manuals
Gratis schema's

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Ref. No.	Part No.
●	SZZOL 18
○	RZZOL 02

Note:
When changing mechanism parts,
apply the specified grease to areas
marked "XX" as shown in the drawing.**• SPRING ILLUSTRATION**The spring illustration used shows the actual size so it can be used
to check the shape of the spring.

(The illustration shows the spring separated from the mechanism.)

203A

204A

211A

212A

217

218

219

220

231A

235

236

239

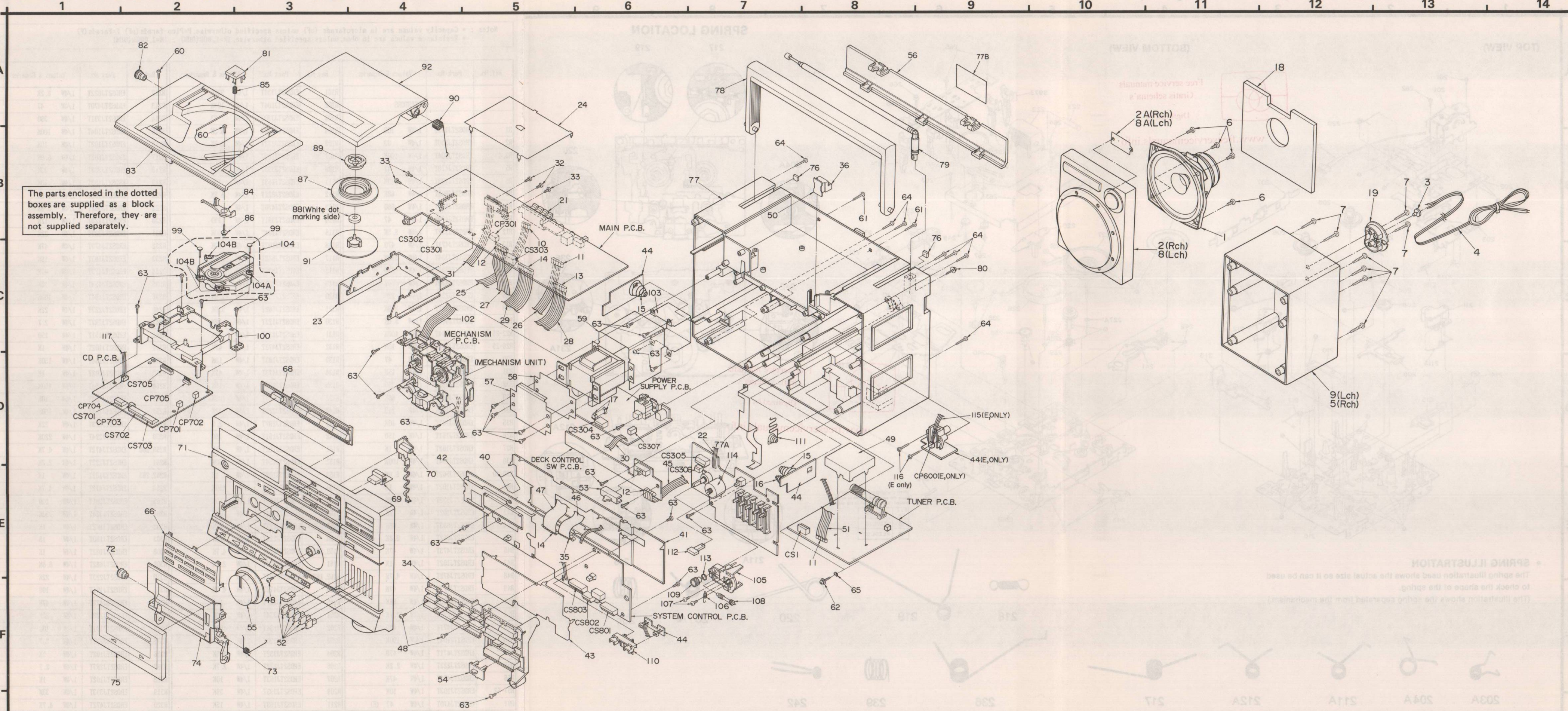
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Notes : * Capacity value are in microfarads (uF) unless specified otherwise, P-Pico-farads (pF) F-Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM) , 1M=1,000k (OHM)

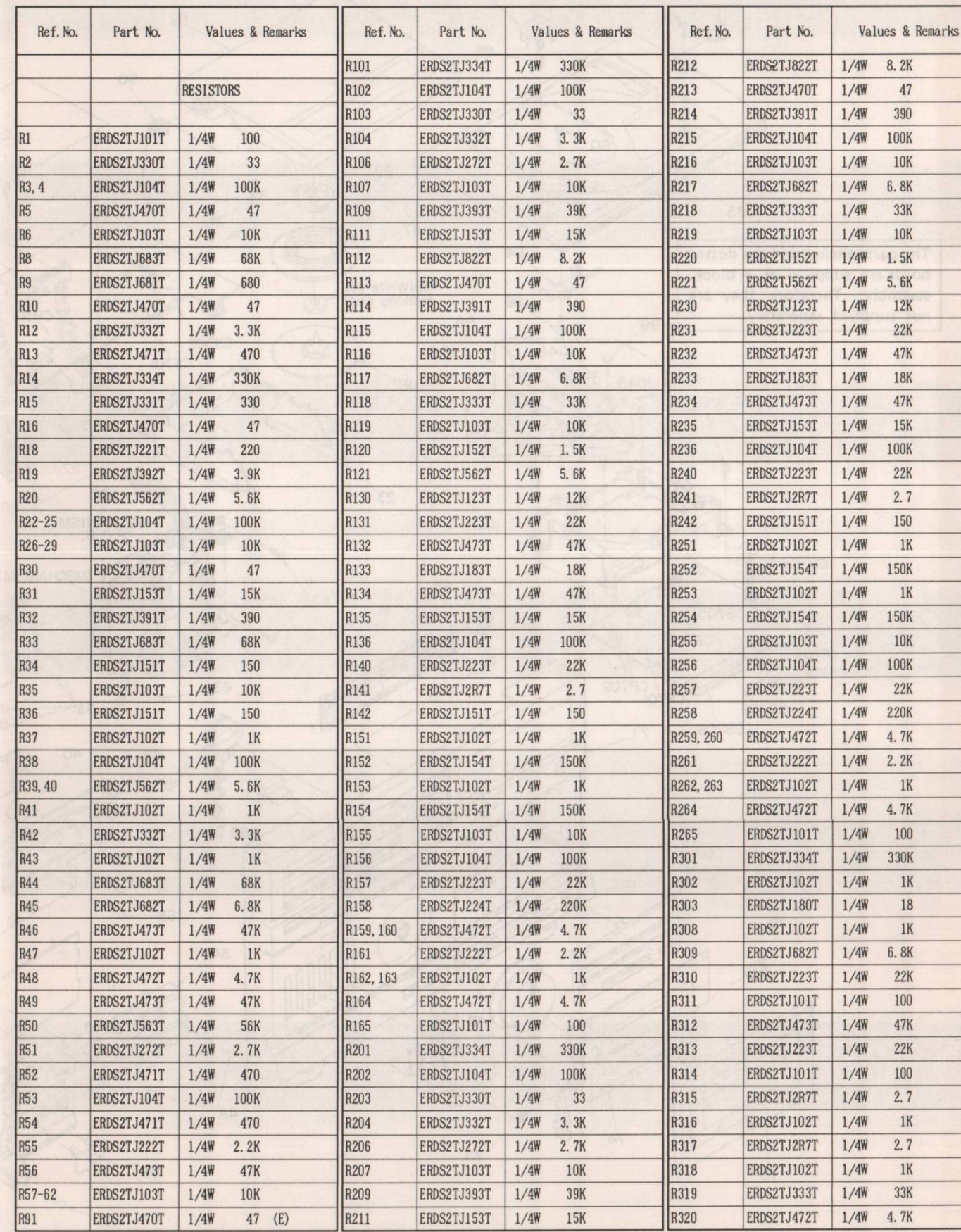
Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
RESISTORS								
R1	ERDS2TJ101T	1/4W 100	R101	ERDS2TJ334T	1/4W 330K	R212	ERDS2TJ822T	1/4W 8.2K
R2	ERDS2TJ330T	1/4W 33	R102	ERDS2TJ104T	1/4W 100K	R213	ERDS2TJ470T	1/4W 47
R3,4	ERDS2TJ104T	1/4W 100K	R103	ERDS2TJ330T	1/4W 33	R214	ERDS2TJ391T	1/4W 390
R5	ERDS2TJ470T	1/4W 47	R104	ERDS2TJ332T	1/4W 3.3K	R215	ERDS2TJ104T	1/4W 100K
R6	ERDS2TJ683T	1/4W 10K	R106	ERDS2TJ272T	1/4W 2.7K	R216	ERDS2TJ103T	1/4W 10K
R8	ERDS2TJ683T	1/4W 68K	R107	ERDS2TJ103T	1/4W 10K	R217	ERDS2TJ682T	1/4W 6.8K
R9	ERDS2TJ681T	1/4W 680	R109	ERDS2TJ393T	1/4W 39K	R218	ERDS2TJ333T	1/4W 33K
R10	ERDS2TJ470T	1/4W 47	R111	ERDS2TJ153T	1/4W 15K	R219	ERDS2TJ103T	1/4W 10K
R12	ERDS2TJ332T	1/4W 3.3K	R112	ERDS2TJ822T	1/4W 8.2K	R220	ERDS2TJ152T	1/4W 1.5K
R13	ERDS2TJ471T	1/4W 470	R113	ERDS2TJ470T	1/4W 47	R221	ERDS2TJ562T	1/4W 5.6K
R14	ERDS2TJ334T	1/4W 330K	R114	ERDS2TJ391T	1/4W 390	R230	ERDS2TJ123T	1/4W 12K
R15	ERDS2TJ331T	1/4W 330	R115	ERDS2TJ104T	1/4W 100K	R231	ERDS2TJ223T	1/4W 22K
R16	ERDS2TJ470T	1/4W 47	R116	ERDS2TJ473T	1/4W 47K	R232	ERDS2TJ183T	1/4W 18K
R18	ERDS2TJ221T	1/4W 220	R117	ERDS2TJ682T	1/4W 6.8K	R233	ERDS2TJ473T	1/4W 47K
R19	ERDS2TJ392T	1/4W 3.9K	R118	ERDS2TJ333T	1/4W 33K	R234	ERDS2TJ473T	1/4W 47K
R20	ERDS2TJ562T	1/4W 5.6K	R119	ERDS2TJ103T	1/4W 10K	R235	ERDS2TJ153T	1/4W 15K
R22-25	ERDS2TJ104T	1/4W 100K	R120	ERDS2TJ152T	1/4W 1.5K	R236	ERDS2TJ104T	1/4W 100K
R26-29	ERDS2TJ103T	1/4W 10K	R121	ERDS2TJ562T	1/4W 5.6K	R240	ERDS2TJ223T	1/4W 22K
R30	ERDS2TJ470T	1/4W 47	R130	ERDS2TJ123T	1/4W 12K	R241	ERDS2TJ2R7T	1/4W 2.7
R31	ERDS2TJ153T	1/4W 15K	R131	ERDS2TJ223T	1/4W 22K	R242	ERDS2TJ151T	1/4W 150
R32	ERDS2TJ391T	1/4W 390	R132	ERDS2TJ473T	1/4W 47K	R251	ERDS2TJ102T	1/4W 1K
R33	ERDS2TJ683T	1/4W 68K	R133	ERDS2TJ183T	1/4W 18K	R252	ERDS2TJ154T	1/4W 150K
R34	ERDS2TJ151T	1/4W 150	R134	ERDS2TJ473T	1/4W 47K	R253	ERDS2TJ102T	1/4W 1K
R35	ERDS2TJ103T	1/4W 10K	R135	ERDS2TJ153T	1/4W 15K	R254	ERDS2TJ154T	1/4W 150K
R36	ERDS2TJ151T	1/4W 150	R136	ERDS2TJ104T	1/4W 100K	R255	ERDS2TJ103T	1/4W 10K
R37	ERDS2TJ102T	1/4W 1K	R140	ERDS2TJ223T	1/4W 22K	R256	ERDS2TJ104T	1/4W 100K
R38	ERDS2TJ104T	1/4W 100K	R141	ERDS2TJ2R7T	1/4W 2.7	R257	ERDS2TJ223T	1/4W 22K
R39,40	ERDS2TJ562T	1/4W 5.6K	R142	ERDS2TJ151T	1/4W 150	R258	ERDS2TJ224T	1/4W 220K
R41	ERDS2TJ102T	1/4W 1K	R151	ERDS2TJ102T	1/4W 1K	R259,260	ERDS2TJ472T	1/4W 4.7K
R42	ERDS2TJ332T	1/4W 3.3K	R152	ERDS2TJ154T	1/4W 150K	R261	ERDS2TJ222T	1/4W 2.2K
R43	ERDS2TJ102T	1/4W 1K	R153	ERDS2TJ102T	1/4W 1K	R262,263	ERDS2TJ102T	1/4W 1K
R44	ERDS2TJ683T	1/4W 68K	R154	ERDS2TJ154T	1/4W 150K	R264	ERDS2TJ472T	1/4W 4.7K
R45	ERDS2TJ682T	1/4W 6.8K	R155	ERDS2TJ103T	1/4W 10K	R265	ERDS2TJ101T	1/4W 100
R46	ERDS2TJ473T	1/4W 47K	R156	ERDS2TJ334T	1/4W 330K	R301	ERDS2TJ334T	1/4W 330K
R47	ERDS2TJ102T	1/4W 1K	R157	ERDS2TJ223T	1/4W 22K	R302	ERDS2TJ102T	1/4W 1K
R48	ERDS2TJ472T	1/4W 4.7K	R158	ERDS2TJ224T	1/4W 220K	R303	ERDS2TJ180T	1/4W 18
R49	ERDS2TJ473T	1/4W 47K	R159,160	ERDS2TJ472T	1/4W 4.7K	R308	ERDS2TJ102T	1/4W 1K
R50	ERDS2TJ563T	1/4W 56K	R161	ERDS2TJ222T	1/4W 2.2K	R309	ERDS2TJ682T	1/4W 6.8K
R51	ERDS2TJ272T	1/4W 2.7K	R162,163	ERDS2TJ102T	1/4W 1K	R310	ERDS2TJ223T	1/4W 22K
R52	ERDS2TJ471T	1/4W 470	R164	ERDS2TJ472T	1/4W 4.7K	R311	ERDS2TJ101T	1/4W 100
R53	ERDS2TJ104T	1/4W 100K	R165	ERDS2TJ101T	1/4W 100	R312	ERDS2TJ473T	1/4W 47K
R54	ERDS2TJ471T	1/4W 470	R201	ERDS2TJ334T	1/4W 330K	R313	ERDS2TJ223T	1/4W 22K
R55	ERDS2TJ222T	1/4W 2.2K	R202	ERDS2TJ104T	1/4W 100K	R314	ERDS2TJ101T	1/4W 100
R56	ERDS2TJ473T	1/4W 47K	R203	ERDS2TJ330T	1/4W 33	R315	ERDS2TJ2R7T	1/4W 2.7
R57-62	ERDS2TJ103T	1/4W 10K	R204	ERDS2TJ332T	1/4W 3.3K	R316	ERDS2TJ102T	1/4W 1K
R91	ERDS2TJ470T	1/4W 47 (E)	R206	ERDS2TJ272T	1/4W 2.7K	R317	ERDS2TJ2R7T	1/4W 2.7
			R207	ERDS2TJ103T	1/4W 10K	R318	ERDS2TJ102T	1/4W 1K
			R209	ERDS2TJ393T	1/4W 39K	R319	ERDS2TJ333T	1/4W 33K
			R211	ERDS2TJ153T	1/4W 15K	R320	ERDS2TJ472T	1/4W 4.7K

Ref. No.	Part No.	Part Name & Description		Remarks
C712	ECEA1HU010B	E. CAPACITOR	50V 1	
C713	ECEA1HN010SB	E. CAPACITOR	50V 1	
C715	ECFR1C333KR	. CAPACITOR	16V 0.033	
C716	ECEA1HN010SB	E. CAPACITOR	50V 1	
C717	ECFR1C333KR	. CAPACITOR	16V 0.033	
C718	ECBT1H102KB5	. CAPACITOR	50V 1000P	
C720	ECEA1HNR47SB	E. CAPACITOR	50V 0.47	
C721	ECFR1C683MR	. CAPACITOR	16V 0.068	
C722	ECEA1HNR47SB	E. CAPACITOR	50V 0.47	
C723	ECEA1AN220SB	E. CAPACITOR	10V 22	
C725	ECFR1C104MR	. CAPACITOR	16V 0.1	
C726	ECQV1H334J23	P. CAPACITOR	50V 0.33	
C727	ECQV1H474J23	P. CAPACITOR	50V 0.47	
C728	ECEA1CU220B	E. CAPACITOR	16V 22	
C730	ECEA1CU220B	E. CAPACITOR	16V 22	
C733	ECBT1H270J5	. CAPACITOR	50V 27P	
C735	ECBT1H270J5	. CAPACITOR	50V 27P	
C736	ECBT1H104ZF5	. CAPACITOR	16V 0.1	
C737	ECEA0JU471B	E. CAPACITOR	6.3V 470	
C738	ECEA1CU100B	E. CAPACITOR	16V 10	
C741	ECBT1C103MR5	. CAPACITOR	16V 0.01	
C742	ECEA0JU101B	E. CAPACITOR	6.3V 100	
C743	ECBT1H104ZF5	. CAPACITOR	50V 0.1	
C747	ECBT1C332MR5	. CAPACITOR	16V 3300P	
C748	ECFR1C333KR	. CAPACITOR	16V 0.033	
C750	ECEA0JU101B	E. CAPACITOR	6.3V 100	
C751	ECFR1C333KR	. CAPACITOR	16V 0.033	
C752	ECEA1HUR33B	E. CAPACITOR	50V 0.33	
C753, 755	ECEA1HPS010B	E. CAPACITOR	50V 1	
C756	ECBT1C332MR5	. CAPACITOR	16V 3300P	
C757	ECEA1CU100B	E. CAPACITOR	16V 10	
C758	ECFR1C104MR	. CAPACITOR	50V 0.1	
C760	ECFR1C104MR	. CAPACITOR	16V 0.1	
C761	ECEA0JU471B	E. CAPACITOR	6.3V 470	
C762, 763	ECBT1H471KB5	. CAPACITOR	50V 470P	

CABINET PARTS LOCATION (See parts list on pages 54 and 55.)



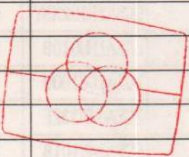
Notes : * Capacity value are in microfarads (μF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)



Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
R321	ERDS2TJ682T	1/4W 6. 8K	R557	ERDS2TJ103T	1/4W 10K	C8	RCBS1H3R3KCY	50V 3. 3P
R322	ERDS2TJ103T	1/4W 10K	R558	ERDS2TJ182T	1/4W 1. 8K	C9-12	RCBS1H102KBY	50V 1000P
R323	ERDS2TJ102T	1/4W 1K	R559	ERDS2TJ102T	1/4W 1K	C13	RCBS1H100JCY	50V 10P
R326	ERDS2TJ472T	1/4W 4. 7K	R562	ERDS2TJ392T	1/4W 3. 9K	C14	RCBS1H181KBY	50V 180P
R327	ERDS2TJ104T	1/4W 100K	R600	ERDS2TJ151T	1/4W 150 (E)	C15	RCBS1C103MY	16V 0. 01U
R328	ERDS2TJ102T	1/4W 1K	R601	ERDS2TJ101T	1/4W 100 (E)	C16	ECEA1HJ2R2B	50V 2. 2U
R329	ERDS2TJ472T	1/4W 4. 7K	R801-806	ERDS2TJ103T	1/4W 10K	C17, 18	ECFT1C223MDY	16V 0. 022U
R330	ERDS2TJ102T	1/4W 1K	R807	ERDS2TJ223T	1/4W 22K	C20	ECFT1C223MDY	16V 0. 022U
R331	ERDS2TJ681T	1/4W 680	R808-810	ERDS2TJ104T	1/4W 100K	C21	RCBS1H331KBY	50V 330P
R332	ERDS2TJ103T	1/4W 10K	R811-815	ERDS2TJ103T	1/4W 10K	C22	RCBS1C103MY	16V 0. 01U
R333	ERDS2TJ821T	1/4W 820	R816	ERDS2TJ124T	1/4W 120K	C23	ECEA1J0110B	6. 3V 100U
R334	ERDS2TJ101T	1/4W 100	R817	ERDS2TJ106T	1/4W 10M	C24, 25	ECFT1C223MDY	16V 0. 022U
R335	ERDS2TJ472T	1/4W 4. 7K	R818	ERDS2TJ334T	1/4W 330K	C26	ECEA1CU100B	16V 10U
R336	ERDS2TJ103T	1/4W 10K	R819	ERDS2TJ105T	1/4W 1M	C27	ECFR1C473MR	16V 0. 047U
R337	ERDS2TJ472T	1/4W 4. 7K	R820	ERDS2TJ101T	1/4W 100	C28	RCBS1C103MY	16V 0. 01U
R338	ERDS2TJ3R3T	1/4W 3. 3 Δ	R821	ERDS2TJ472T	1/4W 4. 7K	C29	RCBS1H102KBY	50V 1000P
R339	ERDS2TJ101T	1/4W 100	R823, 824	ERDS2TJ472T	1/4W 4. 7K	C30	RCBS1C103MY	16V 0. 01U
R340	ERDS2TJ392T	1/4W 3. 9K	R825	ERDS2TJ104T	1/4W 100K	C32	RCBS1C103MY	16V 0. 01U
R341	ERDS2TJ332T	1/4W 3. 3K	R826-829	ERDS2TJ102T	1/4W 1K	C33	RCBS1H470JLY	50V 47P
R342	ERDS2TJ682T	1/4W 6. 8K	R830	ERDS2TJ562T	1/4W 5. 6K	C35	ECQP2A391GZT	100V 390P
R343	ERDS2TJ395T	1/4W 3. 9M	R831	ERDS2TJ104T	1/4W 100K	C36	ECQP2A181JZT	100V 180P
R348	ERDS2TJ103T	1/4W 10K	R832	ERDS2TJ474T	1/4W 470K	C37	ECQP2A121JZT	100V 120P
R349	ERDS2TJ472T	1/4W 4. 7K	R833	ERDS2TJ103T	1/4W 10K	C38, 39	ECFT1C223MDY	16V 0. 022U
R350	ERDS2TJ103T	1/4W 10K	R834-838	ERDS2TJ474T	1/4W 470K	C40	RCBS1H121KBY	50V 120P
R351	ERDS2TJ391T	1/4W 390	R839-844	ERDS2TJ103T	1/4W 10K	C41, 42	RCBS1C103MY	16V 0. 01U
R352	ERDS2TJ102T	1/4W 1K	R845	ERDS2TJ681T	1/4W 680	C43	ECEA1J0110B	10V 100U
R353	ERDS2TJ391T	1/4W 390	R846-848	ERDS2TJ472T	1/4W 4. 7K	C44	ECEA1HJ2R2B	50V 2. 2U
R354	ERDS2TJ103T	1/4W 10K	R849	ERDS2TJ474T	1/4W 470K	C45, 46	RCBS1C103MY	16V 0. 01U
R355	ERDS2TJ102T	1/4W 1K	R850	ERDS2TJ103T	1/4W 10K	C47	RCBS1H102KBY	50V 1000P
R356	ERDS2TJ332T	1/4W 3. 3K	R851	ERDS2TJ393T	1/4W 39K	C48	RCBS1C103MY	16V 0. 01U
R357	ERDS2TJ103T	1/4W 10K	R852	ERDS2TJ473T	1/4W 47K	C49, 50	ECEA1HUR47B	50V 0. 47U
R358	ERDS2TJ223T	1/4W 22K	R853	ERDS2TJ103T	1/4W 10K	C51	ECEA1HJ010B	50V 1U
R359	ERDS2TJ103T	1/4W 10K	R854	ERDS2TJ474T	1/4W 470K	C52	ECQP1102JZT	100V 1000P
R360, 361	ERDS2TJ1R5T	1/4W 1. 5	R855	ERDS2TJ103T	1/4W 10K	C53	RCBS1H102KBY	50V 1000P
R362	ERDS2TJ103T	1/4W 10K	R856	ERDS2TJ473T	1/4W 47K	C54	ECEA1HNR47S8	50V 0. 47U
R363	ERDS2TJ104T	1/4W 100K	R857	ERDS2TJ562T	1/4W 5. 6K	C55	RCBS1C103MY	16V 0. 01U
R364	ERDS2TJ473T	1/4W 47K	R858	ERDS2TJ103T	1/4W 10K	C56	RCBS0J223NYY	50V 0. 022U
R365	ERDS2TJ103T	1/4W 10K	R860	ERDS2TJ151T	1/4W 150	C57	ECQP1103JZ	100V 0. 01U
R366	ERDS2TJ682T	1/4W 6. 8K	R863, 864	ERDS2TJ104T	1/4W 100K	C58	ECFR1C473MR	16V 0. 047U
R367	ERDS2TJ223T	1/4W 22K	R866	ERDS2TJ221T	1/4W 220	C59	ECEA1CU101B	16V 100U
R368, 369	ERDS2TJ102T	1/4W 1K	R867	ERDS2TJ220T	1/4W 22	C60	ECFT1C223MDY	16V 0. 022U
R370, 371	ERDS2TJ103T	1/4W 10K	R868-870	ERDS2TJ104T	1/4W 100K	C61	ECEA1HJ010B	50V 1U
R372	ERDS2TJ153T	1/4W 15K				C62	RCBS1C103MY	16V 0. 01U
R401	ERDS2TJ472T	1/4W 4. 7K			CAPACITORS	C63	RCBS1H270JLY	50V 27P
R402, 403	ERDS2TJ181T	1/4W 180				C64	ECEA1J470B	10V 47U
R404	ERDS2TJ471T	1/4W 470	C1	RCBS1H331KBY	50V 330P	C65	ECFT1C223MDY	16V 0. 022U
R501	ERDS2TJ221T	1/4W 220	C2	RCBS1H102KBY	50V 1000P	C66	RCBS1H471KBY	50V 470P
R551	ERDS2TJ472T	1/4W 4. 7K	C3	RCBS1H4R7KCY	50V 4. 7P	C67, 68	RCBS1H150JCY	50V 15P
R552, 553	ERDS2TJ104T	1/4W 100K	C4	RCBS1H100JCY	50V 10P	C69	ECEA1HJ3R3B	50V 3. 3U
R554	ERDS2TJ472T	1/4W 4. 7K	C5	RCBS1H330JLY	50V 33P	C70, 71	RCBS1H102KBY	50V 1000P
R555	ERDS2TJ103T	1/4W 10K	C6	RCBS1C103MY	16V 0. 01U	C72	RCBS1H331KBY	50V 330P
R556	ERDS2TJ182T	1/4W 1. 8K	C7	RCBS1H102KBY	50V 1000P	C73	ECEA1HJ010B	50V 1U

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
C74	RCBS1H331KBY	50V 330P	C167	ECEA1HU010B	50V 1U	C305	ECEA1AU470B	10V 47U
C75	ECEA1HU2R2B	50V 2. 2U	C168	ECEA1HUR22B	50V 0. 22U	C306	ECEA1HU2R2B	50V 2. 2U
C76	RCBS1H8R2KCY	50V 8. 2P	C169	ECEA1HUR33B	50V 0. 33U	C307	ECEA1CU100B	16V 10U
C77	RCBS1H181KBY	50V 180P	C170	RCBS1C472MXY	16V 4700P	C308	ECEAOJU101B	6. 3V 100U
C78	RCBS1H2R7KCY	50V 2. 7P	C171	ECFT1C153MDY	16V 0. 015U	C309	ECEA1AU221B	10V 220U
C79	RCBS1H010MCY	50V 1P	C172	ECFT1C333MDY	16V 0. 033U	C311	ECQP1272JZT	50V 2700P
C80	RCBS1H331KBY	50V 330P	C201	ECEA50M1RB	50V 1U	C312	RCBS1C103MY	16V 0. 01U
C81	RCBS1H101KBY	50V 100P	C202	RCBS1H101KBY	50V 100P	C313	ECQP1123JZT	100V 0. 012U
C82	RCBS1H331KBY	50V 330P	C203	RCBS1H471KBY	50V 470P	C314	RCBS1C103MY	16V 0. 01U
C93	ECFT1C223MDY	16V 0. 022U	C204	ECEAOJU101B	6. 3V 100U	C315	ECQV1H474JZ3	50V 0. 47U
C94	RCBS1H331KBY	50V 330P	C205	ECFT1C333KDY	16V 0. 033U	C316	ECQP1223JZ	100V 0. 022U
C98	RCBS1H102KBY	50V 1000P	C206	ECEA1HU010B	50V 1U	C317	ECEA1AU221B	10V 220U
C99	RCBS1H331KBY	50V 330P	C211, 212	RCBS1H102KBY	50V 1000P	C318	ECEA1HU010B	50V 1U
C100	RCBS1H331KBY	50V 330P	C213	ECFT1C223KDY	16V 0. 022U	C319	RCBS1C332MXY	16V 3300P
C101	ECEA50M1RB	50V 1U	C214	ECEAOJU101B	6. 3V 100U	C320	ECFR1C473MR	16V 0. 047U
C101A	RCBS1H331KBY	50V 330P	C215	ECFT1C333KDY	16V 0. 033U	C321	ECEA1CU101B	16V 100U
C102	RCBS1H101KBY	50V 100P	C216	RCBS1H330JLY	50V 33P	C323	ECEA1AU221B	10V 220U
C102A	RCBS1H102KBY	50V 1000P	C217	RCBS1H102KBY	50V 1000P	C324	ECQP1822JZ	100V 8200P
C103	RCBS1H471KBY	50V 470P	C218	ECEA1HU010B	50V 1U	C325	ECFT1C104MDY	16V 0. 1U
C104	ECEAOJU101B	6. 3V 100U	C222	ECEA1CU100B	16V 10U	C326	RCBS1C103MY	16V 0. 01U
C105	ECFT1C333KDY	16V 0. 033U	C230	ECEAOJU332E	16V 3300U	C327	ECEA1HU2R2B	50V 2. 2U
C106	ECEA1HU010B	50V 1U	C240	ECEA1AU101B	10V 100U	C328	ECEA1CU100B	16V 10U
C111, 112	RCBS1H102KBY	50V 1000P	C241	ECEAOJU101B	6. 3V 100U	C329	ECEA1AU330B	10V 33U
C113	ECFT1C223KDY	16V 0. 022U	C242	ECEA1HUR33B	50V 0. 33U	C330	ECEA1EU221B	25V 220U
C114	ECEAOJU101B	6. 3V 100U	C243	RCBS1H471KBY	50V 470P	C331	ECEA1AU471B	10V 470U
C115	ECFT1C333KDY	16V 0. 033U	C244	ECEA1AU222E	10V 2200U	C332	ECFT1C104MDY	16V 0. 1U
C116	RCBS1H330JLY	50V 33P	C246	ECQV1H224JZ3	50V 0. 22U	C333	RCBS1H471KBY	50V 470P
C117	RCBS1H102KBY	50V 1000P	C251	ECEA1HUR47B	50V 0. 47U	C334	ECEA1CU100B	16V 10U
C118	ECEA1HU010B	50V 1U	C252	RCBS1H471KBY	50V 470P	C335, 336	ECEA1EU222	25V 2200U
C122	ECEA1CU100B	16V 10U	C253	ECEA1HU010B	50V 1U	C337	ECEA1AU101B	10V 100U
C130	ECEAOJU332E	6. 3V 3300U	C254	ECFT1C333KDY	16V 0. 033U	C339	ECEA1AU101B	10V 100U
C140	ECEA1AU101B	10V 100U	C255	RCBS1H471KBY	50V 470P	C340	ECEA1AU470B	10V 47U
C141	ECEAOJU101B	6. 3V 100U	C256	ECEA1CU100B	16V 10U	C342	RCBS1H471KBY	50V 470P
C142	ECEA1HUR33B	50V 0. 33U	C257	RCBS1H102KBY	50V 1000P	C343	ECEA1AU101B	10V 100U
C143	RCBS1H471KBY	50V 470P	C258	RCBS1C332MXY	16V 3300P	C344-347	RCBS1C103MY	16V 0. 01U
C144	ECEA1AU222E	10V 2200U	C259	ECEA1HU2R2B	50V 2. 2U	C351-354	ECQV1H224JZ3	50V 0. 22U
C146	ECQV1H224JZ3	50V 0. 22U	C260	ECEA1HUR33B	50V 0. 33U	C360-362	RCBS1H331KBY	50V 330P
C151	ECEA1HUR47B	50V 0. 47U	C261	ECEA1HU010B	50V 0. 1U	C370	ECEA1EU47B	25V 4. 7U
C152	RCBS1H471KBY	50V 470P	C262	ECFT1C333MDY	16V 0. 033U	C371, 372	ECEA1CU100B	16V 10U
C153	ECEA1HU010B	50V 1U	C263	ECEA1HU010B	50V 1U	C373	ECEA1AU101B	10V 100U
C154	ECFT1C333KDY	16V 0. 033U	C264	ECFT1C683KDY	16V 0. 068U	C401, 402	ECEA1HK010B	50V 1U
C155	RCBS1H471KBY	50V 470P	C265, 266	RCBS1C103MY	16V 0. 01U	C501	ECEA1AU471B	10V 470U
C156	ECEA1CU100B	16V 10U	C267	ECEA1HU010B	50V 1U	C551, 552	ECEA1AU221B	10V 220U
C157	RCBS1H102KBY	50V 1000P	C268	ECEA1HUR22B	50V 0. 22U	C553	RCBS1H102KBY	50V 1000P
C158	RCBS1C332MXY	16V 3300P	C269	ECEA1HUR33B	50V 0. 33U	C554	ECEA1EU47B	25V 4. 7U
C159	ECEA1HU2R2B	50V 2. 2U	C270	RCBS1C472MXY	16V 4700P	C555	ECEA1HU2R2B	50V 2. 2U
C160	ECEA1HUR33B	50V 0. 33U	C271	ECFT1C153MDY	16V 0. 015U	C556	RCBS1H102KBY	50V 1000P
C161	ECEA1HU010B	50V 0. 1U	C272	ECFT1C333MDY	16V 0. 033U	C600	RCBS1H102KBY	50V 1000P (E)
C162	ECFT1C333MDY	16V 0. 033U	C301	ECEA1HU010B	50V 1U	C801-804	RCBS1H331KBY	50V 330P
C163	ECEA1HU010B	50V 1U	C302	RCBS1H102KBY	50V 1000P	C805, 806	RCBS1C103MY	16V 0. 01U
C164	ECFT1C683KDY	16V 0. 068U	C303	ECEA1HU010B	50V 1U	C807	ECEAOJU101E	6. 3V 100U
C165, 166	RCBS1C103MY	16V 0. 01U	C304	RCBS1H102KBY	50V 1000P	C808, 809	RCBS1H102KBY	50V 1000P

Ref. No.	Part No.	Values & Remarks
C810	ECEAJU221E	6. 3V 220U
C811	ECEA1CK100B	16V 10U
C812, 813	RCBS1H220JCY	50V 22P
C814	RCBS1H101KBY	50V 100P
C815	RCBS1H102KBY	50V 1000P
C816	RCBS1H331KBY	50V 330P
C817	RCBS1H151KBY	50V 150P
C818, 819	RCBS1H331KBY	50V 330P
C820, 821	RCBS1C103MY	16V 0. 01U
C822	ECEAJK101B	6. 3V 100U
C825-831	RCBS1H331KBY	50V 330P
C832	RCBS1H180JCY	50V 18P
C833-836	RCBS1H331KBY	50V 330P
C837	RCBS1C103MY	16V 0. 01U
C838	RCBS1H331KBY	50V 330P
C839	RCBS1H180JCY	50V 18P
C971	ECBT1H101KB5	50V 100P



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